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Philosophical Dissertations

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EGYPTIANS and CHINESE

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TRANSLATED FROM THE FRENCH

OF

MR. DE PAUW,

PRIVATE READER TO FREDERIC II. KING OF PRUSSIA,

BY CAPT. J. THOMSON.

IN TWO VOLUMES.

VOLUME THE FIRST.

LONDON:
PRINTED FOR T. CHAPMAN,

NO. 11. FLEET-STREET.

1795.

[illegible]

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V. 11

ERRATA.

Page xvi. line 9, in the Preface, *for* Lao, *read*, Tao-*h*o.

37, — 1, *for* natural, *read*, maternal.

47, — 13, *for* Bucaſtus, *read*, Bubafſtus.

163, — 19, *for* violent, *read*, leſs violent.

169, — 10, *for* did influence, *read*, did not influence.

229, in the note, *for* Egypt, *read*, India.

230, — 12, *for* Ninifo, *read*, Ninifo.

266, — 25, *for* made this prince ſuperintend, *read*, under this prince ſuperintended.

277, — 23, *for* glaring, *read*, glaring.

293, — 11, *for* Danicanus, *read*, Damianus.

304, — 8, *for* Naucratum, *read*, Naucratis.

307, — 14, *for* Pyre, *read* Pyr.

309, and in other places, *for* Mongol, *read*, Mogul.

—————, *for* Marc Paul, *read*, Marco Polo.

313, — 24, *for* turn, *read*, term.

324, — 27, *for* all China did not believe any vegetable, *read*, in all China no vegetable.

332, — 2, *for* ſoldier, *read*, Chineſe ſoldier.

334, and in other places, *for* Sericum, *read*, Serica.

ADVERTISEMENT.

IT was, at first, the intention of the Translator to investigate somewhat fully, the system of misrepresentation, formerly introduced by the Jesuits, respecting China; and the various artifices they still employ to invalidate what is here imputed to them by his friend Mr. de Pauw. That project, however, through the interference of professional duties, has been since necessarily abandoned: but those motives of apprehension, which produced so many bitter invectives against our author, and such affected disparagement of his critical acumen, may perhaps be sufficiently obvious, on a perusal of the following extracts from a French Description of China, lately translated into English.

“ The Chinese suppose,” says the Abbé Grofier, “ that between all the parts of the human body there is a certain influence on the one hand, and a sympathy on the other, and these form the basis of their system of physic: but

it is chiefly upon a knowledge of the pulse that they found their most infallible prognostics. When a Chinese physician is called to visit a sick person, he places the patient's arm upon a pillow, after which he applies his four fingers along the artery, sometimes softly, and sometimes with force. He employs a considerable time in examining the beats of his pulse, and in comparing their difference, for it is by a quicker or slower, a stronger or weaker pulse, and its regular or irregular motion, that he discovers the source of the disorder, and, without asking any questions, informs the patient where he feels pain, what parts are affected, and what are most exposed to danger; he also tells him in what manner, and in what time, his disorder will terminate.

“ From this precision one would be apt to conclude that the Chinese are much better acquainted with anatomy than is generally supposed in Europe. It is true they never use dissection, and that they do not even open the bodies of their dead; but if they neglect to study nature in dead subjects, which always leave much to be guessed, it appears that they have long studied living nature with profound attention and advantage.

“ The

“ The art of discovering whether a man has hanged himself or been strangled by others, is a discovery which belongs to the Chinese only. In certain criminal cases, it tends greatly to ease the embarrassment of their tribunals, and might in the like circumstances often serve to clear up the doubts of ours.

“ The purple fever is a disease very dangerous in Europe, but few die of it in Tonquin. The Tonquinese treat it in the following manner: they take the pith of a certain reed, dip it in oil, and apply it successively to all the purple spots on the body: the flesh then bursts *with a report as loud as that of a pistol*; and after the corrupted blood has been squeezed out, they finish the cure by rubbing the wounds with a little ginger.”

These absurd details are copied literally from page 97 of the first, and 482 of the second volume of GROSIER'S CHINA, which abounds with other fables equally ridiculous. Yet in the preface to that work, the author presumes to direct the following expressions against Mr. de Pauw, without adverting how irresistibly they recoil on his own head:—*It would be in vain to carry our critical observations on this man any farther; it is sufficient to have shewn by a few examples what little credit is due to productions*

which present nothing but a collection of disgusting falsehoods and vague assertions, unsupported by facts or any authority whatever.

The Translator has already offered Mr. de Pauw's curious DISSERTATIONS ON THE GREEKS to the English reader; and the reception they obtained, encouraged him in the present publication; especially, at a time when the flattering but fallacious prospect of commercial advantages had extraordinarily interested this country, in all that relates to China.

P R E F A C E.

WHEN the art of studying the customs, manners, and characters of nations began to be reduced to fixed rules, the expediency was perceived of acquiring, in the first place, exact ideas relative to the state of population, the extent, as well as cultivation, of country, and the nature of climate. Researches were afterwards to be made on the mode of living, and the expedients devised by each political society to satisfy the wants of the first and second necessity. The propriety is obvious of introducing what belongs to rural œconomy, previous to any discussions on the arts, which are the offspring of agriculture. When all these objects are attained with some degree of precision, the more difficult task may be undertaken of examining religion and government. This should be reserved for the last; because the author is then more firm in his principles, better informed concerning facts, and if he has

not labored in vain, his abilities must have augmented in proportion to his exertions.

Such is nearly the order we have followed in comparing a celebrated nation of Africa, with another equally remarkable in Asia. In works of pure amusement, some phrases frequently decide the fate of a whole book; because where neither depth of thought nor erudition are requisite, if one passage displeases, it is natural to suppose all the rest defective. But in philosophical discussions, which are connected together almost imperceptibly, nothing can be understood if the chain escapes, or the author is not regularly followed.

It should be remembered, that to read two volumes with attention is a very trifling task when compared to the painful labor and perseverance required in compositions of this nature.

The Chinese are not described here from ideas generally received, but according to facts; and it must be allowed that they lose greatly by being judged in this manner. Men of real learning have long perceived that the reputation of these Asiatics was principally founded on enthusiasm, excited in Europe by the missionaries, whose minds were easily familiarized with the marvellous. Instead of abandoning such errors and preju-

prejudices, some modern writers have persisted in bestowing encomiums on the Chinese, without ever examining seriously how far they were founded. Those who dared not to excuse infanticide have endeavoured to justify the inhuman custom of castrating children, by supposing it to be derived from a punishment which anciently was inflicted on men only. If ever this torment could really have been invented by any legislator, he acted in direct contradiction with himself; because the intention was evidently to spare the life of the criminal, and yet the species of mutilation to be substituted, is almost invariably mortal when practised on grown persons. Finally, it must not be believed that ever the primitive tyrants of the East entrusted the care of their concubines to men emasculated by the law; for, beyond a doubt, the eunuchs of the palace were at first selected from children born in bondage; and the introduction of this atrocity cannot astonish those who reflect on all the injuries human nature has suffered from despotism. Besides the badness of civil institutions, polygamy and jealousy produced disorders not to be controlled by sovereigns, who were themselves more culpable than all their subjects. Domitian, the emperor, was precisely in this case when he prohibited the castration of children;

children ; and yet that tyrant sported with the lives of men without compunction.

In our days the prepossessions in favor of the people of China have been carried so far as to maintain that neither real nor personal servitude of any kind subsists among them ; and this is likewise asserted by the author of the *Philosophical and Political History of the European Establishments in the two Indies* *. But he might with equal reason allege, that the negroes of St. Domingo, who cultivate a few sugar-canes, are real republicans.

Nothing surely is more to be desired, than that slavery could be abolished for ever ; yet if three or four thousand years have not sufficed to inspire the Chinese with some just ideas concerning the natural rights of man, what can be expected from all their pretended moralists, in whose works nothing is found on the subject of bondage or polygamy ? They inculcate one after the other, according to a very hackneyed maxim, an unbounded submission on the part of the people, and of the women, who are kept in the most dreadful dependence not only by artificial lameness, but the dread of punishments, which for them, and criminals guilty of high treason, are always capital. Sometimes they are tied on

* Vol. i. p. 90.

a plank, while the executioner, with hooks heated in the fire, tears from their bodies a prodigious quantity of flesh to be minced afterwards with a knife; and his life must answer if the victim expires before the operation is terminated. This is what the Chinese call cutting a person alive into ten thousand pieces; and it has been inflicted more than once on missionaries, although of late the mode of strangling them has prevailed, and we know it to have been practised on the Jesuits Henriquez and Athemis, in the year one thousand seven hundred and forty-eight, when they were arrested by the police in the province of *Nan-kin*. This was certainly a great cruelty; for these unfortunate wretches should either have been banished to Europe, or shut up during their lives in China. The emperors of that country permitted the exercise of the Christian religion in their dominions at five or six different periods, and as frequently caused it to be prohibited. Continual revolutions of that kind failed not to occasion much bloodshed, although no maxim is more evident, than that none should be spilt on account of religious persuasions.

The author of the *Philosophical History*, already cited, has imagined, besides, that the bonzes of China would have rendered themselves objects of ridicule by even pretending to

possess lands ; and he believes that all those miserable jugglers live entirely on charity. But, in fact, the government of that empire never attempted by any means, either good or bad, to prevent the monks from acquiring property. When the superstition of the emperor *Wou-tsong*, or, what is the same thing, the weakness and cruelty of that prince, excited the bonzes of *Lao* to persecute those of *Che-kia*, it was found that forty thousand bonzeries, or monasteries of the second rank, possessed one million *tsching* of land not taxable. There, as in many other countries, when imposts cannot be collected from freeholds, the unprivileged property has to make good the deficiency ; and thus one great abuse produces another. The possessions we have mentioned were cultivated by one hundred and fifty thousand miserable slaves of both sexes, who were not negroes, but Chinese bought in the different provinces. In the course of this Work it will appear, that with regard to what was taken from the bonzes, neither policy nor the intention of relieving the misery of the people had any part. The whole was the effect of an atrocious persecution, kindled between two rival sects, bent on mutual destruction. The inveteracy of those who destroyed the pagodas of *Fo*, can be compared to nothing but the zeal with which they were re-established.

Multi-

Multitudes of monks indeed are seen in China, who live in beggary; but if they were all in that situation, our ideas could not be changed respecting the institutions of that empire. The chiefs of the bonzeries have never been enjoined to promote study among their novices, that the country might dispense with foreigners. Even in one thousand seven hundred and seventy-two, it was necessary to invite four German Jesuits to make almanacs, and to preside at the mathematical tribunal of Pe-kin. Thus the death of Father Hallerstein and some French missionaries, would necessarily involve the Tartars in great embarrassment; for they could not have recourse to the bonzes of *Che-kia*, who are, without exaggeration, the most ignorant of mankind. All application to their literati must be equally unsuccessful; for that term, applied to those among the Chinese who can read and write, has been strangely abused in different relations, and its meaning requires many restrictions.

All the Chinese works published in Europe, like the *Chou-king*, and Military Art, by Father Amiot*, tend to discover more and more the weakness of such productions. Although the original text, literally translated, would scarcely exceed the size of a pamphlet, yet so many

* They appeared at Paris in 1770-2.

trifling

trifling notes and vain observations have been added, with prints childishly colored, that they form two quarto volumes. These are better calculated to enrich the editors, than to instruct the learned, who, frequently caught by the pompous titles of books brought from Asia, are greatly surprised to find them filled with nothing more than the most trivial and common-place maxims of morality. In the whole of the *Chou-king* not one passage affords the smallest light relative to the origin of the Chinese; and what concerns the progress of the arts and trades is as inconclusive and improbable there, as in other works we shall have occasion to mention.

M. de Guignes says, he has little prospect of ever publishing the *Y-king*; and instead of regretting this, we may consider it as a very fortunate circumstance. Some learned men in Germany, whose intentions were very good, advised the Jesuits not to waste paper by printing the works of the pretended Chinese philosopher *Men-tse* *. Although an edition did appear at Prague, we have reason to believe that in all Eu-

* "Non est optandum ut Jesuitæ *Mentsum* alterum Sinenſium philoſophum producant: neque enim meliora dare poterunt, nec magis ſana, nec magis utilia." Gundl. Philoſ. Hiſt. Moral. cap. 5.

rope it was never read by thirty persons. None have had the courage to peruse even the writings of *Confucius*, either because they are considered as a collection of suppositions and forgeries, or that every person believes them to be altogether uninteresting. The translators, besides, have drowned them in endless Latin phrases, and an incomprehensible jargon, like that of the worst preachers. Although we have never seen an edition published at Genoa, and which differs perhaps from that of Paris, it seems almost impossible that the productions attributed to *Confucius* can be adapted to European reading. They are so destitute of things, and filled with such frivolous maxims, that they prove insupportably tiresome, even to men whose time is consecrated to dry studies, and who walk cheerfully over the thorns which are scattered on their way.

In the course of these researches, the Chinese are constantly considered as a people of Scythian or Tartar origin, because it requires no extraordinary degree of penetration to perceive, that they possess at this day a remarkable resemblance to the ancient Scythians. Both nations carried the symbol of the dragon, and their military ensigns consisted alike of party-colored stuffs, representing the most frightful monsters. When
2 their

their cavalry, says Arrian in his *Tactics*, advance in full speed, their banners swell like the sails of a ship, and produce a very formidable effect *. The Romans, on this account, were induced to copy models they had probably taken in some combat, as Justus Lipsius presumes in his *Military Treatise*.

✓ We have also demonstrated, that the chimera of immortality, still ridiculously pursued by the Chinese, was anciently very universal among different nations of Scythian extraction. This appears clearly from many quotations, and particularly where Pliny speaks of a physician of Thrace, a follower of Zamolxis, concerning whom the ancients appear to have had prejudices very similar to those since entertained by travellers in their accounts of the Grand Lama.

The system of the transmigration of souls first suggested to the Scythians the possibility, in a certain sense, of rendering themselves immortal. But before they came to the point of taking drugs, and employing those enchantments mentioned by Plato †, they had recourse to some practices equally austere with those of the fakirs of India. On these ceremonies may have been founded what is said of the *Plistes*, or *Cistes*,

* *Tactic.* page 20.—See also *Suidas* on the Scythian ensigns.

† In *Charmid.*

the *Capnobates*, the *Abioi*, and even of certain *Seres*, confounded by several modern writers with the Chinese. Yet the *Seres* are represented to us as a society of men, who trafficked by exchanging commodities with great good faith, and among whom theft was unknown; while the Chinese, on the contrary, have rendered themselves so infamous by their commercial frauds, that they cannot be trusted with gold or silver; and no country in the world possesses thieves in greater numbers. Those, who cultivate the country, far from the corruption of the great towns, are the only people among whom any virtue or probity can be found; and they may be considered as composing what is most respectable in the nation.

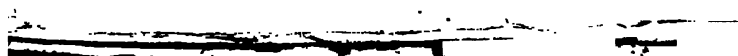
Serica, properly so called, is that country known to us by the name of *Igour*, where the Lamic religion prevailed, perhaps in very distant times, and its spirit was always favorable to monkism. Thus it appears that the ancient Tartars were nearly in the same situation with the Chinese, who have no clergy, but are overburdened with monks; and the swarms of bonzesses found there have been confounded in different relations with common prostitutes.

With regard to the communication, supposed to have subsisted between China and Egypt, every person

person will be convinced, by reading this work, that nothing was ever less founded. It is astonishing how it could have escaped observation, that in the year one thousand one hundred and twenty-two before our era, the Egyptians made use, as Plutarch says, of twenty-five letters, or only twenty-two, according to the discoveries of the moderns. It must therefore appear very absurd to suppose that the Egyptians neglected their alphabet, which was very simple, and carried into China nothing more than the hieroglyphics, employed alone by their priests, and which have no resemblance to the Chinese characters, whatever chimerical writers may have imagined. Neither can any affinity be discovered in religion or language between these two countries. Yet nations, springing from the same stock, however distant, preserve always sufficient idioms to trace a common origin. Thus in the German, Greek, and Latin, we find an analogy not to be mistaken. Whole phrases of the latter language may be constructed, where the words, as well verbs as substantives, are equally employed in Germany. Therefore so exact a combination of the rules of grammar and of syntax could never have been the effect of chance.

Those

Those who pretend to have approached much nearer truth, or historical probability, assert, that in all Asia, the Hindoos alone have any resemblance to the ancient Egyptians. No notice is here taken of the Jews, who do not now form a separate nation, either in Europe or Asia, and whose bondage in Egypt was never doubted. To me it appears evident, that many extraordinary events have taken place on our globe, concerning which we cannot have any certain knowledge, because the thread of tradition is broken. But history, in times when it is to be considered as authentic, never mentions any regular communication between Egypt and India, previous to the reign of the Ptolemies. In the First Section of this work, some opinion may be formed of what should reasonably be thought of the pretended expeditions of the Egyptian Sesostris.



FIRST PART.

PRELIMINARY DISCOURSE.

IN this work we propose to examine how far the ancient Egyptians resembled the modern Chinese, and in what points they differed from them.

It is necessary on all such matters to enter into very considerable discussions ; for those, who trust entirely to appearances, are in danger of experiencing continual illusions. The analogy sometimes supposed to exist between distant races of men, may readily prove fallacious, when more pains are taken to form systems than to make researches. Many observations will be found here well calculated to display the manners, customs, physical constitution, and maladies of two nations very remarkable in every respect, but less known in the eighteenth century than would easily be credited. This proceeds from the obstacles encountered in studying the monuments of Egypt and the different accounts of China, where nothing is more com-

mon than contradictions. It is even a fortunate circumstance, that travellers did not agree in their narratives ; otherwise their impostures could not have been so easily detected. So many errors must evidently have arisen from their total incapacity to describe the arts, trades, manner of living, and all such essential objects, by which real philosophers endeavour to acquire a knowledge of nations.

What appears to merit particular attention is, the system formed by the Egyptians relative to their aliments. In developing, by the aid of natural history, all the parts of their dietetic regimen, we find that not the smallest knowledge of such regulations has ever reached China. Although the Chinese practise at this day the artificial incubation of eggs, it is by an effect of pure chance that they pursue a similar mode with the inhabitants of Egypt, where it was connected in some measure with the regimen of the sacerdotal class. But what seems still more remarkable is, the connexion of all those moral and physical causes, by which the arts and sciences were kept in perpetual infancy among the Chinese. When they speak of their antiquity, they pretend that the secret of cutting and polishing marble has been known to them for more than four thousand years ; and yet they have

PRELIMINARY DISCOURSE.

have never been able to form one beautiful statue. The time is likewise very long since they first exercised the pencil; but although they continue to employ it daily, their painters appear to be still more imperfect than their sculptors. The little progress they have made in these arts does not render them inferior to the other inhabitants of the south of Asia and of Africa; but their ignorance of astronomy sinks them below all polished nations. The Japanese, the Hindoos, the Persians, and the Turks, succeeded in making calendars at least, without the aid of foreigners; while the Chinese, who pretend to have observed the course of the stars for so many ages, are incapable of composing a tolerable almanac.

It has frequently happened that by a false intercalation they have made the year consist of thirteen instead of twelve months; and the same fatality may probably often occur again. One memorable example of this took place in the year 1670, when no person perceived the error except some Europeans, who were then by chance at the court of Peking; and they acquired the reputation of great philosophers, by proving clearly that a supernumerary month had slipped into the current year. It was resolved not only to retrench this, but to execute the unfortunate

calculator who had inserted a trifling error of the kind in his ephemeris. Thus the greatest cruelty was joined to the grossest ignorance ; for surely an astronomer, who had made the year consist of thirteen months, did not deserve capital punishment. The new edition of forty-five thousand *Tang-fio*, or calendars, more correct, of which three thousand were sent into each province, sufficed, as much as possible, to repair the evil.

More than two hundred years had then elapsed since some persons, taken for Arabs, but who were at most only Mahometans born in China, presided at the tribunal of mathematics, if that name can be given to an academy of Mahometans.

The Chinese, with all their insupportable pride, had addressed themselves to these pretended Arabs to obtain almanacs ; and without their aid, they could not have known, within twenty-nine or thirty days, either the beginning of the new year or the feast of lanterns. Hallerstein, a German Jesuit, is now their chief calculator : He predicts eclipses, and is president of that tribunal of mathematics, to which, ever since the expulsion of the Mogul Tartars, no person ever belonged who was capable of comprehending any one proposition of Euclid.

It is extraordinary, it may be said, that Father Verbiest, who held so long the same place now occupied

occupied by Hallerstein, could not succeed in instructing some young Chinese, at least in the first elements of astronomy. But this must not have been so easy as is imagined, and perhaps indeed it was impossible. The Jesuits were suspected of desiring that the Chinese should remain ignorant, in order to perpetuate their own credit at the court of Peking. But the truth is, that Verbiest did not possess great abilities; for he was deceived in taking the latitude of Peking; and this error was inserted in the *Memoirs of the Academy of Sciences at Paris*, where it has since been corrected.

It must be observed here, that Father Gaubil has taken the greatest pains to convince the learned of Europe, that the ancient Chinese were very enlightened, but that their descendants, degenerating insensibly, are now fallen into a night of ignorance. This is not only false, but impossible. If the astronomers, who lived under the dynasty of *Hans*, had determined in their writings the true figure of the globe, we should not have found other Chinese astronomers some years afterwards maintaining obstinately that the earth was square. Thus in 1505 they had no idea whatever either of the latitude

* Abridgment of the History of Chinese Astronomy, vol. ii.

or longitude of their towns ; and by making the earth square, they of course fell into too many absurdities to be enumerated.

It is really ridiculous to pretend that such a nation was capable of writing its own annals, and of verifying the history of the earth by the aid of astronomy.

Under the dynasty of the Moguls, a number of learned men from Balk were invited into China to compose almanacs, in the same manner we find the Jesuits employed at the present day. Those men most probably calculated some eclipses after they had taken place ; and added a train of observations, which the Chinese inserted in the new editions of their works. Books must often be renewed with them on account of the bad quality of the paper, which besides perishes sooner in their climate than in Europe, although great care is taken to destroy the moths and worms with musk. But whether the Chinese misunderstood these calculations, or that they have been badly translated, the greater part are certainly found defective ; and Mr. Cassini, on examining a winter solstice, very remarkable in the calendars of China, has discovered an error of more than 497 years *.

* Memoirs of the Academy of Sciences at Paris, vol. viii.

The same learned Bactrians constructed several globes and instruments for the Chinese, who never were capable of using them; and far from contributing to their instruction, they only served to precipitate them into the most extraordinary errors. All these matters shall be explained more at large in another section, where, treating of architecture, some notice will be taken of the pretended observatories of Pekin and Nankin.

Unfortunately, the opinion commonly entertained in Europe concerning the Chinese is entirely without foundation. It is believed that, finding themselves incapable of succeeding in those sciences which are immediately connected with genius, they were led to direct their efforts to what depends on reason alone. Morality, we are told, has been carried by them to a degree of perfection beyond what it could ever attain in Europe; but after many researches it is unpleasing to add, that not the smallest trace of this sublime philosophy appears; although penetration on my part has perhaps not been wanting in this essential point.

The progress of this morality cannot be supposed to consist in child-murder, such as it is practised in all the towns from Canton to Pekin; neither can it be reconciled with the annual castration

tration of thousands of male infants ; a custom which revolted at the conquest even the *Mandbui* Tartars, improperly called by us Manchews. It is very certain, without speaking here of polygamy, that no true notions of natural right can be discovered in that domestic slavery, by which so many men, born free, are reduced to the condition of beasts. The Chinese, like the negroes, have the power of selling their children ; and their legislators never had the smallest idea of limiting paternal authority. It will appear, indeed, in the sequel of this work, that the same rock has been fatal to every law-giver of ancient times ; but this general error does not justify the Chinese ; neither can they be compared to the nations of Europe who have abolished slavery, and discovered the real bounds of paternal power, which is the chief end of legislation.

After all this, nothing remains but the extreme good faith of the Chinese merchants, who are surely great moralists, because they write at the entrance of all their shops, Pou-hou, *Here no one is deceived*. Such an inscription could never have come into their heads, had they not been previously determined to cheat every person. Thus even children know that they have false weights and measures ; and were these taken from them to-day, they would contrive to find others

others to-morrow. Europeans have hitherto been at a loss to account for the prodigious number of robbers, who lay waste at times the different provinces; and many things which seem to have the closest connexion with each other, will be found to proceed there from two very different causes.

Respecting the learned of that country, it must appear somewhat strange that they suffer their nails to grow very long, lest they should be taken for laborers; and yet they are far from meriting any such distinction. Could it be found in the real principles of morality, that the earth dishonors those by whom it is cultivated? This seems to contrast strongly with the circumstance of the emperor's laying his own hand to the plough; but in fact, Europeans have a very erroneous idea of that ceremony. Wherever the emperor of China passes, all persons are forced, under pain of death, to remain within doors, through fear of his being seen. This prohibition is never relaxed, as has been believed, on the day of tillage; and the very pomp then displayed before some courtiers, in gilding the horns of the oxen and even the plough-share, is one among the causes which prevent those who pretend to be learned, from cutting their nails. If such men speak of cultivating

tivating the earth, little confidence surely can be placed in their maxims ; and this is partly the reason why so much ground lies waste in China.

Whatever may be the rage of so many forgers of relations for supposing, that not an inch of land is left uncultivated in the whole empire, yet, in fact, scarcely any signs of tillage are visible in the interior of the provinces ; and to this should be attributed the frequent famines and shocking misfortunes which shall be spoken of hereafter. If in our researches little attention is paid to the opinions of some Europeans respecting China, it should be known that our object is to cite facts alone.

The men of letters are generally suspected of having composed spurious histories and books in the name of Confucius, to whom they have attributed writings he could not read ; and it is to his honour to suppose, that the work called *Tchun Tseou*, or the *Spring and Autumn*, is not of his production. It is a wretched little chronicle of the kings of *Lou*, without either the style or manner of the Greeks and Latins, or even of our modern historians. Nothing criminal indeed can be alledged against publishing any moral treatise with the name of Socrates or Theophrastus ; for if the maxims are good, it is of small consequence to know by whom they

were dictated. But this is not the case with historical facts ; for those, who change them, are as culpable as if they had forged a title.

It is not however intended here to insinuate, with some, that the whole annals of China, prior to our era, are founded on mere invention. We may venture to advance, on the contrary, that they reason very badly who pronounce all the Chinese historians to be liars, because the astronomers of China were too ignorant to be accurate. No species of history requires to be verified by astronomical proofs : and we may add still further, that such observations may be false, without preventing the history in which they are inserted from being true. Mezerai, who was nearly upon an equality with the Chinese in matters of this kind, has calculated an eclipse, which, according to modern investigations, could never have corresponded with his description. It results therefore, that Mezerai was deceived in this point alone ; for he is known in all other matters to have deviated little from the truth. Thus the very method, which has been believed so proper to produce evidence, leads to increase uncertainty ; for our doubts must be numerous indeed, if the reality of historical facts is made to depend on the ability, such as it may be, of an astronomer, and particularly of a Chinese.

The

The testimony of the historians of China cannot therefore be justly suspected altogether, because the annals of that country contain some absurd observations. On another point, still more essential, the difficulty of excusing them is infinitely greater. All they relate, for example, concerning the progress of the arts and sciences, is an incongruous mass of fictions. Every thing with them is produced, as if by enchantment; and events succeed each other with inconceivable rapidity: but the greatest absurdity consists in attributing all inventions of that nature to princes, who we know have few opportunities of making discoveries. It was the emperor *Fo-bi* who invented almanacs and fishing-nets, which would certainly be more in the line of an astrologer and a fisherman. To the emperor *Chung-nung*, they consider themselves indebted for all their medicinal knowledge. In one day he became acquainted with the characteristics of sixty venomous plants, and in an equal space of time he discovered the salutary qualities of as many others; although the Chinese, even now, are destitute of every just idea of systematical botany. Finally, the emperor *Hoang-ti* is said to have first practised the art of spinning wool; and the empress his wife that of preparing silk. Afterwards, this man discovered

vered in an instant the whole process of metallurgy; and the exaggerator Martini required nothing more, to represent him as an alchymist. According to such absurd assertions, more discoveries must have been made in China during two or three centuries, than could naturally be supposed to take place among mankind in four thousand years.

Some of the sectaries of *Lao-kium*, unjustly accused by the Jesuits of being at once atheists, forcerers, and idolaters, still exist in different parts of the country. These men are much inclined to suppose the lapse of many ages previous to the reign of *Fo-bi*; either because they believe, that inventions, relative to the arts and trades, could not be confined in so narrow a circle, or that they have some bias to the system of the metempsychosis. It is remarkable that all such nations as believe in the transmigration of souls conceive the world to be much more ancient than men of other persuasions are willing to admit. This is seen in the prodigious period of the Thibetans and Hindoos, which is supposed to have been adopted in China, where it gave rise to what the prince Ulug Beig, nephew of Tamerlane, calls the *Epoch of Chatai*. This is known to include eighty-eight millions of years previous to our present era; and it still continues

to

to be credited in China*. To adopt such a period is reckoned absurd in Europe, and to reject it is considered by the *Fo-fcgang* as no less foolish.

It appears more than probable that the Chinese were formed into a nation long before they became acquainted with letters; and when they attained this knowledge, they had forgotten entirely the names of those by whom the different arts were invented. To avoid leaving a chasm in their annals, they filled them up with childish fables such as we have mentioned; and by chusing the emperors as the fittest persons to whom they could attribute all useful inventions, they discovered the servile ideas which mankind receive from a state of slavery; for it is in the nature of slaves to exaggerate the abilities of their masters.

Nothing more can be asserted with certainty, than that the Chinese are extremely ancient as a people. Their language and manner of writing demonstrate this much better than the annals of *Semet-tfen*, who is the Herodotus of China. He first, it is said, stirred up the ashes of those books which are supposed to have been committed to the flames by the emperor *Dzin-schi-chuan-di*. Mr. Fourmont pretends that all the copies of a work could never have been

* Epochæ celebriores Chataiorum.

destroyed

destroyed in such a manner. To prove this he cites the example of the Talmud; for, according to him, it escaped that odious persecution which very naturally only served to confirm the Jews in their belief. But Mr. Fourmont should neither have brought forward this example, nor compared two things devoid of all resemblance to each other. It was the highest extravagance to attempt the destruction of a book in the possession of men, who were themselves scattered among all the nations of the earth. When the Jews in Europe suffered for their Talmud, or the monstrous collection of absurdities called by this name, they were left undisturbed in Asia and Africa. But the case was different with the Chinese, who had all fallen under the yoke of one prince, infinitely more despotic than Tiberius. Yet the latter succeeded in destroying so completely the annals of Cremutius Cordus, through the whole extent of the Roman empire, that, whatever Tacitus and Dionysius may say to the contrary, not a single copy has been preserved. ✓

Those, to whom the catastrophe of the Chinese books appears doubtful or improbable, support their opinions in the following manner. This supposed misfortune, say they, was invented by the men of letters to excuse the shameful

shameful disorder they have suffered to remain in the history of their first dynasties, which are not less obscure than darkness itself. Not one single work can be produced, continue they, on architecture, astronomy, medicine, or agriculture, that can be ascertained to have existed three hundred years before our era: and yet every person acknowledges that *Schi-chuan-di* had spared every book which treated of such matters only. It must be confessed that this difficulty can never be removed, if researches are not made in China, with views very different from those of the missionaries, who were apt to advance many things, too lightly believed afterwards.

At a time, when it was not possible for me to obtain the smallest knowledge of some experiments made on the highest habitable part of Eastern Tartary, my expressions were consequently vague; but we shall now speak from these observations. On carrying the barometer into some cantons, occupied by the Moguls, it was observed, with surprise, that the mercury descended as low as on the highest points of the Alps*. Yet the convexity must be still greater at the source of the *Orka* and *Selinga*, where we know beyond a doubt that the country is inhabited. To me it appears incontestable that

* *Novi Comment. Acad. Scient. Petropolitanzæ, lib. vi.*

the Chinese came originally from those heights ; and as they must have penetrated into China near the middle of the line marked at this day by the great wall, or the *Van-ly-czin*, it followed of course that the northern provinces were sooner polished than the others. This is attested in all their monuments, and by the very term *Man-dzy*, signifying barbarians of the south, which even at the present day is considered the greatest reproach *. As civilization began towards the north, some of the hordes who crossed the *Hoang-bo*, or yellow river, preserved much longer the ferocious manners of pastoral life they had brought with them from Tartary ; which is the real country of shepherds : they have always existed there, and may probably continue for ever.

Things are therefore seen in that quarter following their natural order, without being deranged or interrupted by the arrival of any foreign hordes, who did not in their transmigration and establishments follow the slope of the soil.

With regard to the history of Egypt, the obscurity and confusion would have been much less but for the inconceivable obstinacy of modern chronologists, who wished to make the

* *Quæstiones Petropolitane de Nominibus Imperii Sinarum.*

annals of the Egyptians agree with those of the Jews. When they found it impracticable to succeed by one mode of calculation, they imagined another, until the different systems of chronology amounted to one hundred and seventeen; and thus we are reduced exactly to the point of having none. It is truly to be desired, that philosophical writers should at some period take place of those vain calculators, who, never agreeing with each other, nor even with themselves, have scattered darkness on every side, and confounded truth with falsehood.

Father Petau ventured to maintain that all the dynasties of Egypt were fabulous*, while, on the other hand, he devoured all the monstrous absurdities of Ctesias, in the same manner that Saturn was said to have swallowed stones.

If Marsham, Pezron, Fourmont, and Jackson, are consulted, they will answer, that the dynasties are far from being fabulous, and that the Jesuit Petau knew nothing of the matter. But yet they require us to believe that four or five kings reigned at once in Egypt; and this arrangement, unknown in ancient times, appears to them so true and reasonable, that they do not even suspect the possibility of its meeting with

* *Dynastias istas confictas et ridiculas esse, temporum longinquitas ostendit. De Doct. Temporum, lib. ix.*

objections.

objections. Unfortunately for them however, it has been discovered in our days that Egypt is a much smaller country than was supposed; and only about half as considerable as Count Caylus himself had imagined; so that four or five kings there, must have been rather too much crowded. One of these pretended kingdoms has been placed in the island Elephantis, because, through ignorance of geography, it was considered as very extensive. Origny, a Frenchman who has published so many fables concerning ancient history, expresses himself in these words: *The town of Elephantina, says he, was built in a very extensive island formed by the Nile a little below the cataracts* *.

The breadth of this island may amount to four hundred fathoms, and the whole length to eight hundred; so that the kingdom they place there must have resembled nearly that of Yvetot. The reader may examine the map of ancient Egypt published by d'Anville, who makes this spot still smaller than it is here described. Such revolting chimeras should therefore be no longer regarded, especially as some attempts will be made in the sequel of this work to explain what might have been that dynasty of Elephan-

* Chronologie du grand Empire des Egyptiens, tome i.

tine kings. Of all the chronologists we have mentioned, the Englishman Jackson alone has perceived that the Pharaohs resided at Thebes and Memphis only, and not in the small towns and villages.

What appears sufficiently certain is, that the Egyptians, about two thousand years before our era, were acquainted with the art of engraving on every species of precious stone. Little serious reflection seems therefore to have been made, on the time which must have elapsed before mankind attained this experience, in a matter unconnected with the wants of life, and originating entirely with luxury. Bochart, after many researches, imagined he had discovered that they began to make use of *schamir*, which, according to him, is emery: it is more probable, however, that the *schamir* is the pumice-stone, employed in polishing marble, but totally useless for engraving. Many experiments, both unfortunate and useless, must have been made, before the qualities of emery, as well as those of the Naxian stone, and the powder of diamonds, were discovered. The ancients had certainly some knowledge of the latter, whatever may have been advanced to the contrary; for Pliny attests it in the most unequivocal terms. Afterwards we may suppose that not fewer attempts were necessary to
invent

invent that machine called a *drill*, without which it is impossible to trace figures and characters on such hard substances. The Peruvians indeed do not employ this instrument in piercing their emeralds; but that operation is very different from what is properly called engraving, which requires saws and chapes, such as were evidently used in the Egyptian antiquities, according to the confession of even Natter himself. We observe very plainly on the obelisk of the Martary the traces of an instrument called *teretron* by the Greeks, and by us a *trepan*. This is a kind of piercer, necessarily formed of the purest steel, or it could not resist the first effort on the granite. Thus all the most arduous operations in metallurgy must have preceded, in the order of time, the construction of the obelisks. In rearing them, it must be confessed, the Egyptians encountered fewer difficulties than pope Sixtus the Fifth, who was silly enough to have those huge stones exorcised publicly by a bishop. But, on the other hand, the Egyptians had infinitely more obstacles to surmount in hewing and conveying such monuments from the quarries, than Fontana experienced in erecting them at Rome.

Infants perhaps may be persuaded that this people undertook similar works immediately on ceasing

to be savages ; but reasonable men will conceive, that numerous ages must have rolled away before the Egyptians had sufficient confidence in their instruments and machines, to think of shaping those masses which are erroneously supposed by some modern writers to have served as gnomons.

The many errors, so generally adopted with regard to the progress of the arts, seem to have proceeded from a passage in Varro, who says positively that in Greece they were all invented in the course of one thousand years*. Varro, instead of being copied in this point, should have been corrected. Never did he advance any thing more evidently false ; because the Greeks cannot be said by any means to have invented the arts. Either they went in search of them, or had them transmitted by others. If, with all the fertility of their genius and the extraordinary excellence of their organs, they had remained in their own country deprived of all connexion with Egypt and Phenicia, a thousand years would not have sufficed for inventing the alphabet. It was however brought to them in one day, and a matter of the greatest chance should consequently never be adopted to establish a general rule.

* De Re Rustica, lib. iii.

With regard to abridging the time, we must not suppose that Varro entertained the ridiculous idea of Mr. Goguet; for he admits, in another place, that mankind certainly remained in a savage state during a frightful number of years, *immani annorum numero*. Thus, he has only been deceived concerning the progress of the arts and sciences, which he supposed to be very rapid, while in fact it was quite the contrary. If any proof of this should be required, it is sufficient to cite our discovery of the real duration of the tropical year, which must have been equally interesting to all the polished nations of the world. This appears at first view to have required only a few annual observations; and yet it could never be effected before the present day. The priests of Thebes and Heliopolis, who fancied they had found the truth, were deceived in several minutes, as we find by the defect in the Julian style.

But the Egyptians, it is said, could not have formed themselves into a nation at an early period, owing to the regular overflowing of the Nile. To this it may be answered, that those who offer such objections have no topographical knowledge of that country: for a thousand times greater and more painful works were necessary to preserve Babylon from inundation,

than could ever be required at Thebes. Yet the learned, who interest themselves much for the Chaldeans, of whom not one single monument is known, endeavour to establish the origin of Babylon in the most remote ages. All the vain reasonings they have hazarded on this point, proceed from the general opinion, that lower Egypt was peopled and civilized before the Thebais. But the contrary of this was the fact; for the Egyptians descended originally from the heights of Ethiopia, and began first to establish themselves above the cataracts. Thus we find their primitive kings residing at Thebes, and not at Memphis; as appears evident from the canon of Eratosthenes and all the catalogues of the dynasties. No great canals were ever requisite for fertilizing the upper Thebais; where only one small branch of the Nile was found extending to *Hieraconapolis*, or the town of Sparrow-hawks: all the extensive dykes began likewise below Thebes. Without making a particular study of geography, it is impossible to form accurate ideas concerning ancient history. - How Father Kircher and Mr. Huët could suppose that an Egyptian colony went into China, although nothing of that kind is noticed either by historians or any monument of antiquity, is altogether inconceivable. Yet visions, which

which should have been forgotten, even now find their advocates, who propose conjectures and systems on that point truly ridiculous. They have gone so far as to pretend, that the Phenician letters and the radical characters of China discover a very striking conformity. But this matter is so futile, that no person of real learning ever engaged in the research; especially after what happened to an Englishman named Needham, and a professor of the Chinese language. Some years ago a bust of Isis, two feet high, and said to be very ancient, was sent from Turin to Rome. It contained on the forehead, the cheeks, and breast, thirty characters exceedingly uncouth. On this the professor we have mentioned, decided boldly, that, although the engravings appeared on an Egyptian antique, yet they were no less Chinese; and he endeavoured to support his assertion by a vocabulary brought from Canton to the library of the Vatican. Mr. Needham, who happened to be on his travels in Italy at the time, was informed of this pretended discovery, and inconsiderately published it all over Europe. At the present day, we know that the bust of Isis, supposed to be so very ancient, was made in Piedmont not long ago, and cut in a dark-colored

colored stone, very common in that country*.

The artist had whimsically engraved thirty-two figures, absolutely without any signification whatever. Although it would be improper to commend such frauds, so common in Italy, and which may one day render the most authentic monuments suspicious, yet it must be confessed, that nothing could have been better calculated to humble the pride of a professor of oriental languages at Rome. He should at least have known that the Chinese, to whom real hieroglyphical inscriptions had been shown, could never decipher one single word. They were very far indeed from forming any idea of the winged circle, the sign of the Agathodæmon, and the cross with a handle, so frequently introduced on the obelisks, the ornaments of coins, and finally on all the monuments of Egypt.

Our antiquaries of Europe have been much puzzled with regard to the subject of this cross with a handle. Not long since Clayton, bishop of Clogher, maintained it was an instrument for planting lettuces. Father Kircher be-

* This is likewise mentioned by the Abbé de Gualco, in his work on the Use of Statues among the Ancients.

lieved

lieved it to be the Creator: Don Martin made it a winnowing-fan; and the famous Herwart took it for a compass*. He cited indeed some authorities; pretending to prove that the Egyptians had small statues of iron and loadstone, representing the bones of Typhon and Orus, to which, without any proofs whatever, it has been supposed the priests paid divine worship†. In the same manner the Chinese mariners are seen, during a tempest, offering sacrifices to the compass; because they are infinitely better versed in the practices of superstition, than in the elements of navigation.

At this day, none of the learned are ignorant, that the celebrated cross with a handle, so frequent among hieroglyphics, is in fact the *phallus*, an obscure representation of the genitals of a man. It is therefore no easy matter to reflect seriously on the strange mistake of Herwart; for, as we perceive, some considerable difference

* Theologic Payenne, part i.

† The following verses of Claudian are cited, to prove that a religious worship was rendered to these figures:

— *Ferrea Martis*

Forma nitet, Venerem magnetica gemma figurat:

Illis connubium celebrat de more sacerdos; &c.

But Claudian does not say that this was practised in Egypt; and the whole may perhaps be nothing more than a poetical fiction.

is to be found between the phallus and a compass. He might easily have observed, that this sign, whether single or complex, is turned in every direction on the obelisks, and towards all the cardinal points of the world. When seen suspended round the necks of figures, its extremity points towards the ground, precisely in the same manner that the Hindoos carry on their breast the *lingam*, which is known to represent more obviously the same object. Yet this is not, as some travellers have ridiculously imagined, the sign of reprobation; for no Hindoo considers himself as rejected by the Divinity.

The expedition of Sesostris has been considered as the most favorable epoch in the history of Egypt, for sending a colony into China; but when examined with the greatest attention, we can affirm it to be nothing more than a sacerdotal fiction, without the smallest particle of reality. This, like what is said of Osiris, undoubtedly referred to the course of the sun, for Sesostris is represented invariably travelling from east to west*, until he had made the tour of the globe, and conquer-

* *Venit ad occasum, mundique extrema Sesostris.*

Lucan. Pharsal. lib. x.

ed, of course, all the habitable world, which was a trifle.

That something to this purport appeared on one of the obelisks at Rome, must not be asserted ; for the translation of Hermapion, such as we have it in Ammianus Marcellinus, is manifestly contradicted by a passage in Pliny, who assures us that the obelisk, spoken of here, contains philosophical observations, not fairy tales.

Megasthenes, cited by Strabo, was perfectly right in maintaining that Sesostris had never even set foot in India ; and he could have arrived there only during the period when the celebrated family of Saccandit still reigned over all Hindoostan. No mention is made of Sesostris in the annals of that country, while the brahmins have preserved in their books, a memorandum of the visit they received from Pythagoras. Yet that philosopher was not escorted, like the Pharaohs of Egypt, by a multitude of robbers, and much less by twenty-eight thousand chariots, as so many amplifiers have repeated, without ever forming any idea of such a numerous equipage.

After having reflected on the conquests of the Carthaginians, the Arabs, and the Moors, it is impossible to deny that warm countries have produced warlike men and conquerors.

But

But it is true likewise, that the expeditions of such people have always terminated under a temperate zone ; and they never left their country in this manner, while any danger could be apprehended there. Sesostris, on the contrary, does not appear to have been very safe in his own dominions. To stop the incursions of some troops of Scenites or Arabian shepherds, who desolated the *Delta*, he endeavoured to cover the whole of lower Egypt by a great wall, like that constructed by the Chinese to check the irruptions of the Tartars, who are not however to be restrained in that manner. In the course of these researches, we shall have occasion to remark at some length those vast ramparts, constructed by the folly of so many nations in different parts of the ancient continent. They imagined that a country might be fortified like a town ; and this idea has produced the most prodigious works that ever appeared on the face of the earth.

The Phenicians, or rather the merchants of Tyre and Sidon, sensible how very important it was for their commerce, to have factories established in Colchis, fixed upon some spots on the banks of the Phasus *. They could pass thither

* These establishments of the Phenicians on the Phasus gave rise to the traditions concerning colonies of Hebrews and Philistines

thither without difficulty by the Mediterranean, and procure many of the commodities of India; while it was almost impossible for a people coming from Africa to penetrate there by land. These establishments of the Phenicians have been considered by Herodotus, as an Egyptian colony founded in Colchis by Sefotris; and his mistake is rendered still more gross, when he himself acknowledges that the Egyptians had no idea whatever of that settlement. This is like saying, that in Spain it is not known that the Spaniards have possessions in Peru.

Herodotus certainly first invented all these fables; for Onomacritus, who lived long before him, has entered into very many details concerning ~~Colchis~~, without saying one word of any Egyptian colony in that country; yet he makes mention of the Phenicians, under the name of Solymi and Assyrians, in his Argonautics, which are commonly attributed to Orpheus*. The poets who wrote afterwards on the expedition of the Argonauts, such as Apollonius of Rhodes and Valerius Flaccus, always preferred

tines in Colchis; because all these neighbouring nations resembled each other in certain customs.

* M. Gefner has justly observed, in his learned notes on the Orphics, that the pretended Solymi and Assyrians of Colchis were really Phenicians.

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the sentiments of Herodotus ; because the marvellous they contain is better adapted to the nature of an epic poem.

It must not be credited, that the name of Sesostris is found in the registers of the Assyrian kings ; nor, above all, that the kingdom of Assyria was in the number of his conquests. In that assertion Castor has evidently copied Ctesias, who of all the Greeks lied with most impudence in history. Thus we find Eusebius, Moses of Chorene, and Cassiodorus, have with reason rejected the *Sethos* of Ctesias from the canon of Assyrian kings, to place in his stead a prince called Altadas or Azatag.

What must be considered still more extravagant, is the opinion that Sesostris constructed a fleet of six hundred long vessels on the Red Sea. This prodigy is placed at a period when the ignorance of the Egyptians in maritime affairs was extreme ; because their aversion to the sea was invincible. It will appear in the sequel, that this repugnance was connected naturally with the principles of their religion and politics. The priests could not approve of exterior commerce ; and, what is very singular, their conduct, according to the position of things, was prudent. When all the institutions of a people are relative to climate, like those of the Egyptians, commerce

merce should be restrained, and agriculture alone encouraged. From this maxim the priests never departed until they were constrained by princes who shook the foundation of the state.

Ship-timber besides was so very scarce in Egypt, that a sufficient quantity could with difficulty be found for completing the vessels employed on the Nile and the different canals. It was surely after many unsuccessful attempts that boats were constructed of baked earth, an invention hitherto never imitated by any nation.—The method of burning these vessels in the fire, of giving them a certain degree of strength by exactness of proportions, of varnishing and covering them with rushes, is now among the number of things unknown, and perhaps to us unnecessary. When the Ptolemies endeavoured to establish a commerce with India by the Red Sea, the want of wood forced them to use wretched barks stitiched with reeds and *papyrus*. Calculated only to carry very small sails, they must have been exceedingly tardy, and almost incapable of being defended against pirates. It appears likewise that they were always conducted by Greek pilots; for the Egyptians understood nothing of working them, whatever Mr. Amailhon may have said to the contrary. This man thought himself a very able mariner, because,

according to his own testimony, he had descended the cataract of the Nile in a canoe. But this feat, where the fall, as Mr. Pococke observes, is not more than seven feet during the floods, has no connexion whatever with the knowledge requisite for navigating the sea.

What seems most certain is, that Sesostris effected much good for his people, and among other things he restored to them the property of lands which had been withheld during the usurpation of the shepherd kings, who were the most unfeeling tyrants that ever appeared in history. Thus the Egyptians had reason to publish the praises of Sesostris; and maintain the reputation they had established in ancient times, of being *the most grateful of mankind*. They were right, we admit, in continually celebrating the memory of this prince, by calling him the second Osiris, and comparing his benefits with those of the sun; but they should not, for all that, have made him conquer the whole habitable world.

Philosophical Dissertations

ON THE

EGYPTIANS AND CHINESE.

SECT. I.

CONDITION OF THE WOMEN, AND STATE OF POPULATION.

NOTHING is more surprising than what some historians relate concerning that unbounded liberty, which they supposed was enjoyed by the women, in so warm a country as Egypt, where the men never ceased to be extremely jealous. This requires examination ; for so great an apparent contradiction between morals and climate, has never been exhibited on any part of our globe.

If, without further discussion, the Chinese are compared in this point with the Egyptians, never did two nations afford less resemblance to each other. But after reflecting on the facts we are about to recite, these matters will appear very different. Yet they are not to be represented as following their natural order, but as approaching more and more the manners of the East, which are so opposite to the dictates of nature.

The history of ancient Egypt resembles a great town in ruins, where nothing is connected, and heaps of fragments tend only to increase the confu-

sion. What little is handed down to us, has no other authority than the testimony of the Greeks, who, not having preconcerted their falsehoods, necessarily fall into mutual contradictions.

Herodotus affirms, that the Egyptians confined themselves to monogamy: Diodorus Siculus assures us, that it was customary there to have several wives, except among the sacerdotal class, who, constantly employed in study and the functions of their office, were permitted to have one only. Thus, Herodotus has been deceived either by the example of the priests, or that of the lower order of people, whose poverty prohibited what the law allowed.

No doubt remains that the institutions of Egypt authorised a plurality of wives, which in warm climates is a necessary consequence of domestic slavery. How is it possible that men should possess female slaves, bought at market, without being led into great abuses? The only mode of correcting libertinism in such cases was by admitting polygamy, without entering into any inquiries, whether the births of males or females were predominant. This resulted from an unpardonable fault in the legislators of the East. Either when speaking as inspired persons, or politicians, they have always established domestic slavery by the force of laws. So great was their error in this point, that it became impossible for them to form any true notions of what are called the rights of man.

This species of servitude in Egypt was probably as ancient as the monarchy. When a freeman there married a slave, the children of that woman acquired all the liberty of their father, because, says Diodo-

rus

rus Siculus, no attention was paid to natural descent. To suppose therefore that women were held in high consideration, is to propose absolute contradictions, which cannot be understood in any sense, or explained in any manner.

The pretended respect of the Egyptians for women proceeded, it has been said, from their veneration for Isis or the Moon. This is assigned as the reason why they have always honored their queens infinitely more than their kings. But if this argument were as solid as it is frivolous and childish, we must however confess, that in all the monuments of this singular people handed down to us, not the smallest trace can be discovered of any preference given to queens. Two or three only have their names recorded; and all the others are as little known as the sultanas of Persia since Sheic Sephi. If the queens of Egypt had taken great part in the government, or in the hatred or love of the people, this resemblance could not have been so striking.

It is an undoubted fact, that, by the most ancient institutions of Egypt, the women were declared incapable of reigning: and this originated from the very principles of the government there, which excluded them entirely from the sacerdotal class. An insurmountable obstacle was thus opposed to their ascending the throne, because it was indispensable to be first consecrated, and adopted in the college of priests, as Plato, Plutarch, Synesius, and all the ancients have testified. Syncellus indeed makes mention of a king, Binotris, as having abrogated the

law relative to the exclusion of women, and declared them capable of succeeding to the crown*. The thing however was impossible; and the error must have proceeded from an impropriety of expression. In Egypt, as in most of the eastern empires, a decree might be made, which entrusted the guardianship of the minor princes to their mothers, or elder sisters, who appeared less dangerous than uncles and brothers. Thus *Skemiophris*, *Ameffes*, and *Achenchres*, although inserted as real queens in some few catalogues of the dynasties, were nothing more than guardians of the presumptive heirs. That they did not reign despotically, is demonstrated from their never having any monument in the gallery destined for the statues of all the kings of the country. Herodotus, who visited that repository, affirms, that Egypt had never been governed by any woman since the foundation of monarchy; except once indeed, says he, that a foreign princess, named *Nitocris* †, ascended the throne evidently by usurpation. It appears that she exercised dreadful cruelties; although some flatterers of her court, as we learn from Manetho, represented her as the most beautiful woman of her time. This sole example is an exception to a rule, of which it confirms the existence; for it cannot be denied that violence might for a time have silenced the laws, and produced a temporary change in the ancient form of government.

All that we have stated cannot be conceived to have any affinity to the dynasty of the Greeks, or

* Syncel. Chronograph. † Lib. ii.

the Ptolemies, who, far from following the institutions of Egypt, overturned them entirely, and regulated the order of succession in the family of the Lagidæ, either according to the Macedonian code, or by simple testamentary bequests. Besides, it may be affirmed, that the bombastic discourse, which the poet Lucan ascribes to Cleopatra, is not conformable to any of our exact notions of history*.

The Egyptians, although oppressed by conquerors who wished to change and overturn every thing in a subjugated country, still continued to preserve an invincible attachment to their ancient laws: they revived them, whenever opportunities were favorable, and maintained them against all the fury of tyranny. After the invasion of Cambyfes, who was little better than a wild beast, they did not renounce the immemorial usage of never conferring on any woman the first functions of the priesthood. Those were neither vain offices, nor empty titles. In order to gain admission, it was necessary to be versed in the sacred dialect, in the ten first Hermetic books, in astrology, physics, and all that was called the wisdom of the Egyptians †. In such paths, women could not have made great proficiency; and had they

* Lucan makes Cleopatra say :

—*Non urbes prima tenebo*

Femina Nilivæ ; nullo discrimine sexus

Reginam scit ferre Pharos. PHARS. x.

This can allude only to Nitocris, and the disorders which took place in the dynasty of the Ptolemies.

† Clemens Alexand. Strom. vi.

even possessed genius for acquiring the necessary knowledge, the priests would never have instructed them; for their superstitions were supported chiefly by secrecy; and they resembled a huge colossus, the feet of which remained always concealed.

In the lapse of time, by an extreme mixture of Persian, Greek, and Roman rites, with the liturgy of the Egyptians, it is very possible that some devotees might have passed themselves in foreign countries as the priestesses of Isis. Yet they could not have received any consecration, and were intruded into the ministry amidst the confusion we have mentioned. This may have given rise to all those monuments cited by Martin, Montfaucon, Count Caylus, and many others, who appear desirous of placing such modern records, fabricated in Italy*, in competition with the positive testimony of ancient history. It would be in vain to attempt proving that the Egyptians, as long as their institutions were in vigor, ever conferred sacerdotal dignities on women, who at most, in a secondary order, could only be charged with some insignificant employments, such as feeding the scarabees, the shrew-mice, and other diminutive animals held sacred. With regard to the bull *Apis*, they were not permitted to see him, unless on the first day of his installation at the temple of Memphis. This animal, according to the calculation of Plutarch and Jablonski, might receive a

* The Isiac Table was not made until the second or third century. It is a calendar, where some figures of Isis have been taken for priestesses. Miscel. Berolin,

respite for twenty-five years from being drowned *. Thus a whole century often elapsed without his being seen more than four times by the women; and besides, the scum of the people alone undertook the strange ceremony to be noticed hereafter.

With regard to the temple of Jupiter Ammon in the Thebais, we may be confident that, like that of Libya, it was totally inaccessible to women †. But by one of those fantastical circumstances so distressing to the sages, a young girl was consecrated to the Jupiter of Thebes: she was called in the Egyptian language *Neith*, and under pretence of being the concubine of the divinity, could prostitute herself to every one until she attained a certain age. It seems obvious that, in this institution, we ought to seek for the origin of the mythological loves of the father of the gods, and likewise the source of an abuse still more fatal, which was practised afterwards at *Thmuis* in the Mendesian Nome.

The Romans were very tolerant towards the most absurd worships brought into Italy by wandering fanatics or vanquished enemies. As they frequently persecuted the Egyptian religion with fury, it has been attributed to their indignation on seeing those abominations said to be practised in the temple of Isis at Rome, long before the days of Decius Mun-

* Jablonki, *Pantheon Egypt.* lib. iv.

† Silius Italicus, when speaking of the temple of Jupiter Ammon in Libya, says:

*Tum quis fas et bonos adyti penetralia nosse
Famineos prohibent gressus.* Lib. iii.

tians; distinguished by rank or birth, it clearly appears that among them the confinement of women was generally established. Eunuchs, in the first place, have ever been found in the courts of their kings. As we know well how little the office of that species of slaves has varied in the East, some opinion may be formed of those Greek historians, who speak of unbounded liberty enjoyed by the women, in a country where eunuchs acquired more authority than can almost be credited, when we consider that the nation had acquired some reputation for wisdom. In fact, the government of Egypt had very great defects: eunuchs were not only permitted to marry, but also to purchase other slaves, and the very essence of things was shocked by imagining a complication of domestic slavery and of marriage. It must not be objected here, that such disorders did not take place until the reign of those infamous usurpers, called the shepherd kings; for Manetho attests clearly that, previous to their days, Pharaoh Ammamenes was the victim of a conspiracy formed against him by the chief eunuchs of his palace. This single example in the annals of Egypt cannot however be compared, in any manner, to the ravages committed by those multitudes of the same class, who have so frequently desolated China.

It is essential to observe, that Villanon and Tavernier were grossly deceived in saying that smooth castration had been invented by the sultan Amurath or Solyman. That operation is so ancient, that the time of its real introduction is unknown. We find
it

it mentioned expressly in Deuteronomy; and the author of that book must have spoken from his knowledge of its being practised among the Egyptians, who were so jealous that they have been accused of suspecting the very embalmers. Herodotus believes that these depraved men actually abused the dead bodies; but we must believe, that jealousy alone, which exaggerates every thing, had excited such injurious suspicions. What appears really true is, that time has not diminished the reigning passion of the men of that unhappy country, as may be seen from what is related by the Chevalier d'Arvieux, and more particularly by Mr. Maillet.

Some travellers have pretended that anciently in Egypt, the bodies of women were embalmed with much more care and magnificence than those of the men. This prejudice has arisen from a matter of mere accident. The greater part of the mummies, conveyed hitherto into Europe, are indeed female bodies, because they have been taken from the vaults of *Sakara* and *Bufris*, where many persons of that sex were deposited. If the Turks and Arabs would permit searches to be made in other places which are known to contain crypts, perhaps mummies of men alone might be discovered. Mr. Pococke supposes that the chief place of sepulture for the part of Egypt nearest Memphis was in the grottoes, along the eastern banks of the Nile. No certain judgment can therefore be formed from circumstances, which depend so much on the fortune of those who dig among the ruins. Neither does it
appear

appear that the bodies of courtezans alone have been found, as Doctor Shaw pretends; for the little coffers placed near them, containing small statues in very free attitudes, and a quantity of pencils, with *surme* or antimony for blackening the eye-brows, do not at all prove the fact. In the East, the custom of painting the eyes has been, and is still in vogue among people of the first quality; and with regard to the images, so ill understood by Shaw and the consul of France, they are undoubtedly representations of Osiris with the *phallus*.

The method of confining the women anciently in Egypt, by depriving them in some measure of the use of their feet, was very different from what is so cruelly practised in China. Plutarch says, that the Egyptians did not permit their women to wear shoes *. Afterwards they imagined it to be inconsistent with decency that they should appear in public with the feet naked; and of course they remained at home. The Kalif Hakim, the third of the Fatimites, and founder of the religion of the Druses, re-established that custom in all its force, and prohibited, under pain of death, even the making of any kind of shoes for women. To introduce or support such a strange usage by the sanction of law, proves a perfect knowledge of the genius and character of eastern nations. If this decree was not found in the *Kitab-al-Machaid* †, what Plutarch asserts might

* Precepta Connub.

† The *Kitab-al-Machaid* is the Bible of the Druses: it contains all the mysteries of their religion founded by the Kalif Hakim; and many details of the life of that extraordinary man.

seem doubtful ; but these two circumstances confirm each other in such a manner as not to be discredited. From the whole life of Kalif Hakim, so much hated by Mahometans, Christians, and Jews, it appears that he possessed very extensive notions of ancient history. If the religion he invented did not make great progress, it was less his fault than that of his century, when the fataticism of the Turks was still in ebullition : he opposed a stream to a torrent.

From not discriminating between the manners of the populace, and those of the higher ranks, which should never be confounded, many ridiculous conclusions have been drawn from a passage of Herodotus literally copied in the Geography of Mela. In Egypt, says he, the men remain at home weaving stuffs, while the women are employed in selling, buying, and transacting business abroad. How is it possible not to perceive, that only the lower class of workmen are meant here, who, following sedentary trades, could not attend to other affairs ? Such people never confine their women, either in Turkey, Persia, or even in China, where more rigor is used in this respect than in any other country ; for they are too poor to have slaves, and not rich enough to maintain many wives. In Egypt the women were sent to exchange tissues for colocasia ; and the whole of their commerce was confined to that single article, as the Arabian authors, who have spoken of this ancient usage, generally allow. But the wretched sway of the Mammalukes, and the still worse government of the Turks, ruined the manufactures there ;

there; and this traffic was seen gradually declining, until at length it disappeared entirely.

The excesses of the women in Egypt, so much spoken of in ancient history, were confined to the very scum of the nation. They danced in the orgies, carried the *phallus* in a manner scarcely to be credited, dressed themselves like *cherubs*, by placing wings to their shoulders, in the same manner that we see them painted on the winding-sheets of the mummies *: they vented lamentations at the gates of the temple of Isis, or wept at the mourning ceremonies of the rich, as we find practised at the present day. They signified themselves at the feast of Bucastus and the procession of Canopus, insulted the passengers on the banks of the Nile, and became furious by taking large doses of *opium*. It was probably during these fits of fury that they prostituted themselves publicly to buck-goats in the canton of Mendes. This fact may be believed; but when Plutarch asserts, in the most positive manner, that some were seen lying with the tame crocodiles in the town of Antæus, it is incredible. On this point we must observe, that the buck of Mendes is supposed, by the learned Jablonski, to have represented the god called *Entes* or *Antes*, in the town of Antæus; and from the great conformity of these excesses he suspects that one had been copied from the other: yet all his explanations are insufficient to persuade me of the reality of the fact. Some have believed that the Egyptians rubbed

* Gordon, Mamiothec.

themselves

themselves with an infusion of saffron, as a protection against those animals, in the same manner that copperas and musk are used against bears and certain serpents. According to Strabo, however, tame crocodiles were really found in Egypt. Of these, indeed, nothing is said in history later than the fourth century of our era; and the last mention made of them is in the legends of the anchorets of Thebais, who may have had some interest in making inquiries concerning the practices of the inhabitants of Tentyris. Be this as it may, none but the most abandoned women presented themselves after depilation before the bull Apis, to whom, during the first days of installation, they discovered the parts of the body which modesty should conceal*. This religious delirium is without example, unless in the history of the Jews, who unclothed themselves to dance around the calf in the desert; and no reason appears why the Englishman Shuckford should pretend to call this in doubt, when it is not denied by the Jews themselves. Some small paintings have been found in the ruins of *Herculaneum*, representing such ceremonies of the Egyptians, where persons are seen dancing naked round an altar. Superstition is a strange passion: to appear

* *Per hos dies sola mulieres Taurum (Apidem) vident, quæ ante faciem ejus adstantes, vestibus sublatis, ei fæmen abrasum ostendunt. Reliquo tempore prohibentur in conspectum Apidis venire. Diod. Sicul. Bibliot. lib. ii.* The same ceremony, we may suppose, was practised with *Onuphis* at Hermonthis; for some stone figures have been found there, representing women on their knees before a bull.

pure in the presence of the divinities, it was judged necessary to be not only without clothes, but even to have the whole hair removed from the body. The sacrificers performed the same ceremony, although indeed they wore their robes in the temple; for the monuments, which prove one of these facts, confirm the other also. The Greeks, who, according to the expression really used by the Egyptian priests, were always children, required nothing more, on seeing these excesses, to be confirmed in the opinion, that the liberty of the female sex was unbounded. We might as well judge of the morals of the Chinese and Indian women by the licentiousness of the Bonzesses and common prostitutes, who are found in the suburbs of all the towns of China, or by the excesses of the dancing girls of Surat, concerning whom so much is said in every account of the East Indies. But it cannot be too often repeated, that, in reading the history of ancient or remote nations, we should be careful to discriminate in such matters.

To entrust, like the Egyptians, the management of domestic affairs entirely to women, says Montesquieu, was contrary at once to nature and reason. But in asserting this he did not reflect on the power of the eunuchs, and still less on the passage of Plutarch we have cited. If any such government had really existed, castration never would have been tolerated. Proofs of this kind are far more conclusive than the vicious observations of Greek travellers, who have evidently described the manners of the vilest populace only. The nature of Montesquieu's ideas is very

conspicuous, when, in his romance of the temple of Gnîdus, he introduces Egyptian women to contend for the prize of beauty, to which they were further than all others from having any claim. In point of bodily faculties the Egyptians were little favored by nature; and the Copts, their descendants, have inherited a deformity, according to Mr. Pococke, not to be concealed by the richest ornaments. It can, therefore, no longer be surprising, when some ancient authors, like *Ælian**, assert, that in their time not one beautiful person could be found among all the indigenous inhabitants of Egypt; for the European families established at Alexandria and Naucratis were out of the question. The women, besides being tawny, had the same species of excrescence as the Caffres, and a defect in the eyes, produced in all probability by that ophthalmia, which shall be mentioned hereafter. It is supposed, that in those days, as well as now, they employed drugs and pastes to render themselves almost monstrously fat, because this was supposed to be the highest degree of beauty: the roots of the false hermodactyl, called *chamir* in Arabia, which they use constantly, may possibly, as Prosper Alpin pretends, have that tendency†. But the climate, and still more the water, contributed likewise; for the ancients have observed the same thing in different parts of Ethiopia, situate immediately above Egypt. Who has ever been surprised,

* De Nat. Animal. lib. iv.

† Rerum Ægypt. lib. iii. In Syria the women are likewise fattened; but they use drugs composed with mercury.

says

lays Juvenal, to see in Meroe the breast of the mother exceeding in size the body of the child * ?

Diodorus Siculus relates, that the Egyptians considered polygamy as favorable to population; and if so, they were greatly mistaken: yet that usage is not productive of such fatal effects as are generally supposed. We may venture to charge Mr. Süssmilch, an author in other respects very estimable, with an evident contradiction, when, in one part of his book, he exaggerates the number of men in China, and in another asserts, that the plurality of wives has rendered the countries where it is customary, almost desert. He did not of course remember that polygamy was established in China. At this day we are much better informed concerning the Turks, who have been so frequently cited to exemplify this opinion. They have ruined agriculture, and, by the farming of imposts, exclusive privileges, and the exactions of bashaws, their commerce is totally destroyed. The Bedouin Arabs have been admitted into the most fertile provinces, without being obliged to change their manners; and finally all the precautions of the Egyptians for stopping the progress of the plague are abandoned. Yet if they were wise enough to establish a better police, and to render the occupations of the husbandman more respectable, the number of inhabitants would be nearly in the same proportion as in Japan or China. To account for the population of all these countries would be difficult

* In Meroe crasso majorem infante mamillam.

indeed, were not certain physical causes more and more apparent in the temperate climates of Asia, which, as we shall endeavour to show hereafter, are prodigiously favorable to the increase of the human race. It would seem, in the first place, that the sedentary life of women in confinement should be productive of more evil than despotism joined to polygamy, by occasioning among them an infinity of maladies, as Aristotle really supposed *. Nothing seemed more founded than this opinion of a philosopher, who had observed and reasoned so extensively. Yet what was imagined to be a necessary consequence does not in fact take place: the women grow old in their prisons, without dying earlier than elsewhere, although deprived in general of the aid of medicines. Even the mistresses of princes must possess very great power indeed to obtain permission for able physicians to visit them. This we find exemplified, when Manouchi and Bernier were admitted to prescribe for the wives of the Great Mogul. The ridiculous refinements, introduced by eastern jealousy, are besides very unfavorable to the art of healing. It may be affirmed, without dread of contradiction, that the Chinese, in point of excessive precautions in such cases, have surpassed all the other Asiatics: Sometimes the end of a silken thread is laid on the hand of the sick woman, while the physician, holding the

* Aristotle pretends likewise that the Egyptians had a kind of defect in their legs: this has appeared to me no otherwise than that the elephantiasis sometimes affects the legs in such a manner that the sick walk with difficulty.

other extremity, pretends to judge of the pulse by the vibrations it produces, and afterwards orders a remedy at hazard. Mr. Tournefort was treated with somewhat more civility, when admitted into the seraglio of the Grand Visir at Constantinople: he had not indeed permission to see or speak to his patients; for between him and them was a wall with small openings, through which the wives of the minister held forth their arms. In Persia none are allowed to enter the harems but matrons, who practise medicine without knowing how to write or read. Since the days of Ibrahim, physician to Sephi the First, who, having arrived at his seventieth year, had acquired so much influence from his great age, no men have been admitted to visit the sultanas; and even he became at last suspected of a great crime. The Jesuit Bazin, who was long first physician to Nadir-Shaw, whom we call Thamas Kouli-kan, does not mention his ever having access to the wives of that prince. What renders the harems so little unhealthy, in contradiction to the opinion of Aristotle, is the mode of surrounding them with vast gardens. The manner of living there is besides very uniform; and epidemic disorders penetrate among them with difficulty. If any thing, therefore, tends to shorten life in such places, it must be despair, or that illegitimate passion to which Nature has attached so great a chastisement.

It is not necessary to discuss here what Diodorus Siculus says of the form of marriage-contracts, by which the Egyptian husbands divested themselves of all authority in favor of their wives. This fable,

sufficiently confuted by Orus Apollo *, is rendered absurd by the facts we have adduced to prove, that the independence of the wives of Egypt was far short of what has been believed. No comparison, however, can be made between them and the women of China, who, by positive fway, are deprived of all the rights of nature. Some moralists, improperly supposed to be philosophers, so far from endeavouring to soften the fate of these unfortunate beings, have rendered it more insupportable by the most insulting maxims. Thus it results, that a Chinese, who kills his wife, is not more amenable to any judge for his conduct, than when he murders his child †. Concerning the practice of infanticide, so horrible in all its circumstances, something more shall be said hereafter.

By a fundamental law of the empire, the women in China are excluded from the throne; because they cannot attend those sacrifices which the emperor, as grand pontiff, must offer four times annually. Yet during the frequent minorities, the empress-mothers hold the reins of state, as is likewise practised by the sultanas *Validé* in Turkey, and by the sultanas *Khanum* or *Khatum* in Persia. It happened twice in China, that the empresses *Liu-Heou* or *Heo-vou-chi*, having been declared guardians of their real or supposed sons while minors, seized on the sovereign authority, and reigned alone, without troubling themselves about

* Hieroglyph. lib. i. cap. 7.

† Osbeck, Reise nach Ostindien und China.

the sacrifices. Historians, in speaking of these women, distinguish them in the catalogue of dynasties by the name of usurpers. It is astonishing that such usurpations are not more frequent in despotic states, where the greater part of the princes are indebted to their mothers for a throne they have attained amidst the dangers that surrounded their infancy. On this is founded that respect generally discovered by eastern monarchs towards their mothers, even when they have divested themselves of every other sentiment of humanity. The chief honor rendered to empress-mothers in China is the celebration throughout the whole empire of the day on which they enter their sixtieth year; and if women never grow old in the seraglios, as some have pretended, it would be absurd to imagine such ceremonies. Yet events of this kind are not rare: the last, in the year one thousand seven hundred and fifty-two, has been described by Father Amyot*, who assures us, that he was forced to shut himself up in his room to avoid seeing the emperor. To mention this circumstance was unnecessary; for every one knows that whenever the emperor passes, the people must, under pain of death, remain barricaded in their houses. Mr. Boulanger says, that this usage has its origin in theocracy; but who does not perceive it proceeding from tyranny and the remorse of despots, who fear at each step to be assassinated? This, we may observe transiently, gives a bad idea of the ceremony of tillage, which, as we have already said, is reduced to a vain parade.

* Lettres Edifiantes, xxviii.

The Chinese are allowed, after their first marriage, to take a number of concubines called little wives. Nominal distinctions, however, are of no consequence, provided the prescribed degrees of affinity and consanguinity are strictly observed; and these are almost infinite among persons who bear the same name. The laws never permit, in any case, to wed half-sisters, sisters-in-law, cousin-germans, or their children; and in this point they differ greatly from those of the Egyptians; yet it is not probable that ever the latter, according to their national institutions, were allowed to espouse their own sisters. If some should object the improbability of any mistake in that matter, we may answer, that the fact is more than probable. Have not the ancients asserted that in Persia the magi wedded their own mothers? while we know by the *Sadder* and the *Zends*, now extant in Europe, that no such thing ever happened there. Does not Cornelius Nepos affirm that the Greek Cimon suffered no reproach for having espoused his sister Elpinice? Yet the testimony of Plutarch proves that it was considered criminal*; and this is corroborated by the declamation of Andocides against Alcibiades†. That orator, speaking in the midst of Athens, was undoubtedly better acquainted with its laws than Cornelius Nepos, who knew nothing of the matter.

* Life of Cimon.

† In some of the printed Greek texts of Andocides, we find *Conon* erroneously inserted for *Cimon*. Miltiades had no son called *Conon*.

The fact is this : By sanction of the Macedonian code a man was permitted to marry his sister, as different examples are found in history. The Ptolemies, therefore, who, as every one knows, were Macedonians, finding themselves transplanted into Egypt, made use, very naturally, of their national right, and permitted the same liberty to the other Greeks established at Alexandria. This became in some measure necessary, as the laws of the Egyptians forbade their having any connubial union with strangers. Thus no historian, previous to the days of Alexander, has ever thought of asserting that the Egyptians espoused their sisters ; because no such usage was introduced among them until after the death of that prince.

If the Macedonians had held incest in horror at their arrival in Egypt, we may be assured that they would not have adopted it from a subjugated and degraded nation. Conquerors in time may indeed accustom themselves to the fantastical manners, and even to the bad laws, of the vanquished ; but this cannot be said of the Ptolemies. Their dominion was scarcely founded before Philadelphus, son of Soter, wedded his own sister Arsinoë ; and the same practice continued afterwards in the family of the Lagidæ down to Cleopatra. No physical degeneration seems to have been produced by such connexions, if we except Ptolemy Physcon, who was a kind of dwarf, and so deformed, that his appearance created the laughter of the Roman ambassadors *. This

* Many dwarfs were born in Egypt about Alexandria : the greater part of those seen anciently at Rome were brought from that country.

remark is more interesting, because some have supposed that a certain degradation really takes place among animals from incestuous copulation, and particularly in the collateral line of the first degree. In a work, published in German on the Mosaic law, Mr. Michaelis describes a number of curious experiments of this kind made on horses in Hungary; and he pretends that nothing so satisfactory had ever been observed by any naturalist. But it is possible, that this case may be in the class of those which admit of no conclusions with regard to man. Some doubts still remain in attributing to incest the birth of all those princes, whose cruelties and follies have rendered the dynasty of the Ptolemies infamous. Augustus, however, was surely to blame in taking so much pains to restore the life of Cleopatra, by causing her wound to be sucked by the Pfylli. Yet she was not the direct issue of an incestuous connexion: her mother had only been concubine to Ptolemy Auletes, who did all that good kings detest. Judging from the family of the Lagidæ, we are tempted to believe, that the motives for preventing marriage between brothers and sisters are not such as are alledged by lawyers, who have spoken so much of apprehended corruption in families. Children, brought up together, acquainted with their mutual defects, and believing themselves equal, should never be united in matrimony; neither are they naturally inclined to such connexions. This is the true cause why the evils so much dreaded are very rare; and the same consequences must always happen when children

dren are brought up together, although not brothers and sisters.

The real national code of the Egyptians, such as it was before the days of Alexander, permitted them to marry their sisters-in-law, who were left childless in widowhood *, as well as their cousin-germans. The same regulations are invariably practised by the Copts. At one time the court of Rome proposed to them secretly, that, in case they would unite themselves with the Latin church, 'no dispensation should be required for their marriages contracted in the second degree of collateral kindred. But these proposals were rejected, because the privileges offered to them, as a new favor, they had already enjoyed from time immemorial. Father de Sollier was wrong in asserting the contrary in his Chronicle of the Patriarchs of Alexandria, where many errors are inserted concerning the Copts.

Thus it seems evident that the degrees of affinity excluded from marriage in Egypt were not very extensive, and the cause is quite natural. The people there were distributed in tribes, and some, like the Jews, were prohibited from having matrimonial

* The Egyptians, persecuted most probably by the first Christian emperors on account of their marriages with their sisters-in-law, had recourse to a singular subterfuge : they maintained that as their sisters-in-law had no children, they must have remained virgins ; as we find by the celebrated constitution of the emperor Zeno, which begins thus : *Licet quidam Egyptiorum idcirco mortuorum fratrum sibi conjuges matrimonio copulaverint ; quod postillorum mortem mansisse virgines dicebantur.* De Incest. et inutil. Nupt. titul. v.

connexion with the rest. It has been believed, that the very animosity subsisting between the inhabitants of certain towns, likewise prevented them from intermarrying; and that the daughters of Bubastis, where the cat was worshipped, never allowed favors to the men of Athribis, who adored the shrew-mouse, although the two towns were not more than twenty-five miles distant. But this aversion, as will appear in the sequel, discovered itself under the Greeks and Romans only, when the authority of the priests, who had known how to restrain one superstition by another, no longer existed.

In China, where no tribes or clans have ever been established, the degrees of consanguinity incompatible with marriage are greatly multiplied. Thus these two nations differ not only in the laws they have composed respecting such matters, but likewise in the motives from which they were dictated: the one constantly opposing the formation of tribes, and the other invariably preserving those already established.

Besides the confinement of women, a child may be reduced in China, at the will of her parents, to a state of real and personal servitude. Those, who do not preserve their virginity until marriage, are irremissibly sold at market for nearly twenty *tails*, or one thousand pence. In this manner they are disposed of to a master, because they can no longer be sold to a husband; and they lose in that case every right of redemption. With the reader's permission, we will offer a few words on this custom of selling children: it is derived evidently from paternal authority,

thority, carried beyond certain limits, which ancient legislators never knew how to fix either in republics or in monarchies. By what fatality their senses could have been fascinated is inconceivable; but they certainly were deluded in an extraordinary degree. When they granted to fathers the power of life and death over their children, they did not see that a man cannot be judge in his own cause; and by allowing parents to sell their offspring for slaves, they proved themselves incapable of perceiving that the possession of children and of cattle is very different. Yet to comprehend this required little penetration. If we are to believe a Greek, called Dionysius of Halicarnassus, some exceptions should be made here, in favor of certain legislators, and particularly of Solon. But he must have been ignorant, that the laws of Solon undoubtedly allowed fathers to exercise the power of life and death over their children*. What appears very singular is, that in the Justinian code we find an admirable rescript of the emperor Dioclesian, who speaks like a philosopher, in contradiction to the unfeeling law of Romulus: he says it is of manifest right, *manifesti juris*, that a father cannot alienate, sell, give, or engage his children; and immediately afterwards, in the same page, follows another edict of the emperor Constantine, asserting that a father is entitled to sell his sons and daughters. This infamous practice was therefore admitted throughout the whole

* Sextus Emp. Hyp. lib. iii. ; and Heliodorus, Æthiop. lib. i.

Roman empire, in derision of Dioclesian, of laws, and of mankind; for the pretext of poverty neither has nor ever had any force, when opposed to manifest right.

The Chinese have been very far from finding the just bounds of parental authority; and it does not appear, indeed, that they ever made it the object of any researches. Besides the right of selling, they are invested by their legislators with the power of life and death over their children, to authorise the different modes of committing infanticide.

Sometimes the new-born children are dispatched by the midwives in a basin of warm water, and something is always paid for this execution; at others they are thrown into the river, tied to an empty gourd, which keeps them floating for a considerable time without expiring*. Their cries are then sufficient to make human nature shudder; but such scenes are too frequent in China to occasion the smallest impression. According to a third mode, they are exposed in the streets, where, every morning, particularly at Pekin, numbers of dirt-carts are ready to convey them away. They are then thrown on dung-hills, and left uncovered, that the Mahometans, if they think fit, may preserve some of their lives. But before the arrival of the machines destined for their removal, it frequently happens that many have been devoured by dogs, and still more by the numerous herds of swine, so common in all the towns of China.

* Torcens, Reise nach China.

No example of such atrocity is to be found among all the anthropophagi of America. The Jesuits pretend, that, in three years, they counted nine thousand seven hundred and two children, thrown on the lay-stalls in this manner. But they did not include such as had been trodden to death by horses and mules, nor those drowned in the canals, nor those devoured in the streets, nor those strangled at their birth, nor those saved by the Mahometans, nor those who had no Jesuits present to count them.

Various but unsatisfactory conjectures have been made as to the causes of these infanticides: the Arabs, and Father Trigault, suppose them to be an effect of the system of transmigration; but we know at present how little this opinion is consistent with facts. The Hindoos, still more attached to the doctrine of the metempsychosis, never destroy their children; for that persuasion prohibits nothing more strongly than murder, and does not permit the slaughter even of animals. The true causes of this abomination will be found to originate from the defects of the government, and the sordid avarice of the Chinese, who, to increase their profits, crowd together in the commercial towns, and along the rivers, while the interior provinces are left uninhabited and totally uncultivated. As these people are governed entirely by interest, they have calculated that it is of greater advantage to destroy a daughter, than a son; the girl costs more than she will bring, and the boy can be sold for more than the expence of rearing him. It is necessary to observe, that none of these monstrous
maxims

maxims have ever been imputed to the Egyptians, except by the Jews, who pretend that they aimed particularly at the lives of their boys. Strabo affirms, that the Egyptians were particularly forbidden to destroy the males; and Diodorus mentions a general prohibition of this kind, with regard to both sexes. The case of the Jews must therefore have been so extraordinary that it stopped for an instant the course of the law, because they were to be treated with the same severity that they themselves exercised towards the inhabitants of Canaan, where they certainly massacred many children in the cradle, and even in the womb of their mothers.

We have now to speak of the custom in China of compressing the feet of the female children, which appears to be an infliction of perpetual pain. Whatever precautions may be used, it is not possible to prevent the sufferings, more or less acute, in the heel, arising from any attempts to walk during life. Travellers, who pretend to explain the method of inflicting this lameness, do not agree amongst themselves, and appear to be very ill informed. Mr. Osbeck says, that, during infancy, a kind of iron shoe is used for this purpose: others pretend that the feet are compressed with sheets of lead; and some assert, that the metatarsus is broken, to fold the toes under the sole of the foot, while caustic washes prevent the fractured bone from becoming carious. All these are doubtless great absurdities; but what seems very certain is, that the Chinese women, when they take off their shoes, continue to preserve the bandages

ages worn under them; for the frequent changing of these would produce many inconveniences. The chief operation apparently consists in placing a ligature above the ankle, taking care not to tighten it so much as to dry up the limb entirely: by these means the foot is prevented from acquiring more than the half of its natural size, as appears by the Chinese shoes, which in general could not be used by European children of more than six years old. The Chinese are ignorant of the period when this charming custom was introduced; but those, who make it the least ancient, pretend it has been in vogue for about three thousand years. The empress *Ta-kia*, who had naturally very small feet, say they, maintained that this was a beauty; and those who believed her, endeavoured to produce artificially the like unnatural effect in their children. Perhaps this ridiculous story has been invented by some Jesuit, who had read Ovid*; for it is incredible, that a woman, shut up in a seraglio, could have made such a revolution in the ideas of those by whom she had never been seen. Without suggesting any doubts concerning the existence of the empress *Ta-kia*, who appears to have been a fabulous person, called by Kircher the Venus of China, we may conclude, with the men of letters there, that this practice was produced by policy, and jealousy, in order to enslave the women, who are watched with no less exactness, than governed with severity.

* Ovid says:

Est pes exiguus, pedis est aptissima forma.

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It must be observed here, that nothing is less founded than the opinion of those who believe that all the females born anciently in China had six toes to each foot; and that in order to make these super-numerary members disappear, recourse was had to those bandages, which were suffered to remain after the evil had ceased. On seeking carefully after the origin of such a whimsical supposition, it seems to have proceeded from Father Trigault, who asserts, that in the provinces of Canton, Quansi, and Cochinchina, the greater part of the inhabitants have at this day two distinct nails to each little toe. From this he infers, without knowing why, that they had in former days six toes to each foot*. Supposing even this to be true, we cannot conclude that the women alone could have been subject to such excrescences. But what proves the whole to be false, is, that no irregularity appears on the limbs of the peasants and the populace of the small towns, where the feet of the children were never compressed. Having occasion for all their members to keep themselves from perishing with hunger, they disregard this tyrannical mode, which would prove as fatal to them as letting their nails grow, like the merchants and literati, who deserve a house of correction.

The circumcision of female children, practised from time immemorial, and still in use among the Egyptians, as may be seen in *the History of the Church of Alexandria* by Father Vansleb, is an operation un-

* *Expositio apud Sinas*, lib. i. cap. 8.

known

known to the Chinese. So far from circumcising even boys, they must have remained ignorant that such an amputation had ever been supposed necessary for salvation, but for the Jews and Mahometans established among them. To this some may reply, that the supposed Egyptian colonies, founded in Greece, renounced likewise the same practice so completely, that no vestige of it remains either in history or mythology. To speak of all the doubts, that may be suggested respecting the reality of any such settlements, would be deviating too far from our present subject: but when we find such men as Orpheus, Amphion, Eumolpus, and legislators like Solon and Lycurgus, visiting Egypt, and returning to Greece, it is easy to conceive how laws, usages, religious feasts and ceremonies, passed from the one country to the other. One single devotee would have sufficed to bring the worship of *Neitha*, or the Minerva of Sais, to Athens; and the feast of the lamps might as easily have been introduced there. Whether the cause be attributed to climate, or to some other circumstance, it is certain that the Chinese differ from the Egyptians, who cut off the fore-skin of all their children. Those who pretend, that the operation was confined to the sacerdotal class, are foolishly mistaken*.

* The custom of circumcision is so deeply rooted in Egypt, that the Copts, who are Christians, continue now to circumcise all their children both male and female. Strabo mentions the same thing as practised in his day, when the sacerdotal order had already for the most part disappeared.

It were indeed to be desired, that the custom of castrating boys in China had never been adopted any more than that of circumcision. Previous to the conquest of the Tartars in the year one thousand six hundred and forty-four, this excess was carried so far as to contradict entirely all the elogies lavished by ill-informed writers on that form of government, where all the magistrates were castrated, and every province pillaged by eunuchs.

Little reason appears for believing that the amazing credit acquired by eunuchs, ever since the foundation of the Chinese empire, has proceeded from a superstitious prejudice, which led the Scythians, or Tartars, to reverence highly in very ancient times those men, who became impotent at the prime of life; because they were regarded as struck by the hand of the Divinity. Hippocrates, alone of all ancient authors, speaks of the eunuchs of Scythia, who, according to him, were dressed like women. Horsemanship he alleges was the first cause of that debility among men who seldom dismounted and never used stirrups *. So far Hippocrates may be believed; but when he adds, that the Scythians were relieved from this misfortune by opening veins on each side of the head, then he should not be credited; because we are well informed at this day, that the spermatic vessels are not, as he supposes, in the organs of hearing. Chinese history begins already,

* Prior to the invention of stirrups, continual equitation occasioned a particular disorder in the hips and swellings in the legs, as we find in the case of Germanicus.

in the year two thousand and thirty-seven before our era, to speak of the great influence of eunuchs. They then governed the emperor, and soon afterwards the empire, if the name of government can be given to an association of robbers, who, under the reign of *Te-tsong*, not only seized on the magistracy, but appropriated likewise the tribute of the provinces, and divided it amongst them like spoils. The office of mandarin could no longer be obtained, without first submitting to mutilation; for the chief eunuchs of the palace never conferred employments on those who were not as vile and despicable as themselves. All the conspiracies either planned or carried into execution by them, would form a long and tedious volume. It is sufficient to observe here, that since the death of *Hiens-tsong*, whom they poisoned, until the year nine hundred and four of our era, they sported with the lives of the emperors, and crowned four successively, who surpassed each other in stupidity and imbecility, to treat them like children. In the course of the tenth century, the eunuchs were driven for a short time from the tribunals. Although again expelled in the twelfth century, they soon acquired their former power; and then it seemed indestructible, because their numbers, instead of diminishing, augmented daily. The poor and the rich vied with one another in emasculating their children, as the means of insuring their admission to honors and places, more than by reading all their lives the *Morals of Confucius*, and the *Menté*.

Things were in this state when the *Mandhui* or *Manchew* Tartars invaded, and conquered in an instant, the whole of China. Of all absurdities there, none shocked them more than to see mankind governed by those who were no longer men. They began therefore by expelling those who had forfeited virility from the public offices; and all the mandarins were in that predicament. Afterwards they reduced, to one-half, the number of eunuchs attached to the court, who amounted to twelve thousand, under the reign of the emperor *Tien-ki*, a man devoid of honor, genius, and talents, who could scarcely be awaked from his lethargy by the crash of the falling empire. Father Schal, from his knowledge of artillery, had gained access to the conqueror *Chung-tchi*, founder of the present dynasty; and he says, that this prince still continued to maintain six thousand eunuchs*. Even that number appears astonishing, when we consider that not more than five or six hundred are employed in the seraglio at Constantinople, as we learn from Mr. Galland, the French interpreter in Turkey. The Tartar guardians of Can-hi, during his minority, drove away all the eunuchs of the palace except those who were employed to guard the women. Since that period they have made frequent attempts to regain admission to public employments; and they will undoubtedly succeed, whenever the present Tartar dynasty becomes entirely corrupted, and ener-

* De Ort. et Progres. Fidei Christ. in China.

vated by the fatal maxims of the conquered people, or by the principles of an incurable policy. Many examples surely tend to prove, that more fidelity and attachment may be expected from the governor of a province who has a family, than from a eunuch who keeps a seraglio.

As even infanticide in China does not wound the first laws of the state, castration there is far from ever being considered as criminal. But the reason of its great prevalence must be ascribed to the extreme rigidity of the Chinese in guarding their women, and the small price of such slaves, who sell for much less than in Persia and Turkey, where, according to the principles of the Koran, neither man nor beast can be castrated. In Persia a civil law, besides, prevents such practices; and eunuchs are therefore brought at much expence from Africa, India, and chiefly from Golconda, where, in the seventeenth century, the greater part of those children were mutilated, who will ever be the chief cause of the weakness of all the Asiatic courts. Father Parenin must have been convinced, during his stay in China, that the rage for emasculation was greater than can well be conceived, when he endeavours to explain by it how polygamy can be so much encouraged in a country, where certainly not more daughters than sons are brought into the world *. But as the children strangled, thrown into rivers, and exposed on dung-hills, are mostly females, the difficulty remains in

* *Lettres Edifiantes*, xxvi.

all its force ; for more girls are massacred than boys castrated ; and, besides, the latter frequently have wives.

It is extraordinary that the Chinese, who allow polygamy, should have more women than they require, and that the Turks, who likewise admit a plurality of wives, should be under the necessity of buying and ravishing constantly in foreign countries*. Even their ambassadors in the capital towns of Europe never fail to employ all the stratagems in their power, to carry off married as well as single women. This fact is well known at Vienna, where all the covered boats, belonging to the Turks, are carefully visited, before they are allowed to go down the Danube.

This circumstance would be altogether inexplicable, were it not known that multitudes of men in China remain in celibacy. More than a million of monks, most of whom are beggars, never marry : the robbers, who desolate the provinces, have no families ; and finally, masters do not permit their slaves to take wives, and the men of that class are very considerable.

Thus the population of China, which, as shall now appear, has been prodigiously exaggerated, arises from causes totally independent of the nature of its laws and government

We have already observed, that the southern provinces of Asia must be very favorable to the propa-

* The number of women carried off or purchased annually for Constantinople, is said to be about nine thousand.

gation of the human species, when it triumphs in defiance of the many evils actually committed, as well as those that are to be constantly apprehended from despotism : and of this we shall now endeavour to explain the causes.

In the temperate climates of Asia, the men are naturally sober : they prefer simple aliments, and refrain from the constant abuse of spirituous liquors, so liable to corrupt or diminish the prolific juices. It is not necessary there to keep children within doors, nor to load them with clothes, as in our northern countries, where the rigor of the seasons forces them to remain so much in repose. This inaction is no less contrary to their health, than to their desires ; for the first passion of infancy is the love of motion.

The mild regions, to which we allude, produce fruit at all times perfectly ripe, as well as of the best quality ; and the second passion of childhood is a vehement appetite for fruits of every kind. This desire proceeds from the heat of the stomach, which diminishes with age : some indeed experience it longer than others* ; but nothing is more rare than to find children indifferent to such food. Whenever this does happen, we may suspect that they suffer from some disorder.

The ancients, who were acquainted with these facts, appear to have passed all bounds, when they

* This inclination for fruit is much stronger in boys than in girls ; and the reason why this should be the case is very natural.

pretend,

pretend, that in Egypt the expence of rearing a child did not exceed twenty drachmæ, unless they spoke of the peasantry alone, to whom even now an infant does not cost more than one farthing a day, and in this calculation the clothing is included. That article indeed is so trifling, that it scarcely deserves mention, as Hippocrates and Diodorus Siculus observed to be the case even in their days.

All the states of Europe, the great and the small, the rich and the poor, have made laws for diminishing the luxury of burials and mourning: but they never attended to the more fatal expence of education, which, according to a fundamental maxim, should be restricted as much as possible in cold countries, where climate alone occasions so many real wants.

In China the women are very fruitful; and we may reasonably credit those, who assert, that mortality among their children is much less frequent than in Europe, where the one-half of mankind die before they attain the age of twenty years. Perhaps no other animals, either in a domestic or savage state, are liable to lose that proportion of their offspring by diseases, previous to the term of maturity.

Without examining here how far the fecundity of the Chinese women may proceed from other causes, independent of constitution, we shall only observe, that they certainly do not suffer from the continual use of warm drinks; but of this more will be said in the following Section.

If the government of China were not so strangely defective, the greatest advantages might be derived
from

from its situation : what seems most wanting there is a body of militia, sufficiently disciplined to protect the country against bands of robbers, who spread devastation on every side, and became powerful enough even to take Peking before the arrival of the Tartars. Banditti continue to commit ravages there, nearly in the same force, without much increase or diminution, as may be judged from the numbers contained in the prisons. Twenty thousand of such criminals are supposed to be taken annually ; and when those of different provinces unite together, the disorders they produce are extreme. The police, introduced by the *Mandchui* Tartars, has hitherto been so well observed, that it prevents robbers from undertaking the siege of any town ; but formerly enterprises of that kind, we may suppose, must have been very frequent, when they were capable of attacking with success such a place as Peking.

It would be superfluous to enter into any long discussions, proving the total want of information in the historians, who have written concerning the population of China. They even vary in their calculations as far as one hundred millions ; for this unpardonable difference is actually found between the calculations of Father Bartole and Father Martini.

The extracts from the registers of capitation, said to be furnished by the Chinese themselves, appear, on the contrary, to have been framed in Europe by Europeans, who assuredly were not very expert. On examination their total fallacy is evident ; for in one province the families are rated at ten, and in another

another at five persons *. Little knowledge of political arithmetic is necessary to perceive that such a disproportion is impossible. In Europe, according to a rigorous estimate, the families in general cannot be allowed to consist of even five persons.

We may venture to assert that no exact notions have hitherto been communicated to us concerning any one town in China. All the details we possess on this subject have been written at random. Father du Halde gives Peking three millions of inhabitants: Father le Comte admits only two millions; and Father Gaubil expresses himself in so vague a manner, that nothing can be concluded from his accounts. Those who vary one million in their estimates of the population of a town, can never hope to make us believe them well informed concerning that of a whole empire, and in a country too, more irregularly peopled than any other corner of the globe. It is proper to pay some particular attention to this article.

In the first place, the Jesuits avow, that if the emperor *Can-bi* had not ordered them to form a map of China, which could not be done by the natives of the country, they should never have known “that, “in the greater part of the principal governments, “whole tracts of more than sixty miles are thinly peopled, little cultivated, and very often so “savage as to be almost uninhabited. These vast

* The 45,305 families of the province of *Koci-tcheou*, are estimated at 251,365 persons; while in the province of *Tun-nan* 132,958 families are supposed to contain 1,433,110 persons;

“wastes

“ wastes are distant from the great roads generally
 “ followed by travellers ; and they were therefore
 “ unknown to the generality of those who have
 “ printed their relations *.”

If any doubt should arise concerning the reality of the fact, it may be thus demonstrated. Almost every stranger who has visited the interior of China, admits the impracticability of journeying at night, unless escorted by men who carry torches, to frighten away the tigers and other carnivorous animals. So many wild beasts could never exist in a country regularly inhabited : they must necessarily have vast solitudes, where they retire to propagate, and whence they make excursions for prey. Such retreats are only to be found in those countries, almost destitute of human habitations in an extent of sixty miles ; and if Germany were in the same neglected state, the Urus might be found there as in the time of Julius Cæsar.

All these uncultivated spots are nothing in comparison with the territory occupied by the savages of China, called *Mau-lao* or rats of the wood ; because they are scattered in families throughout forests and wastes over a distance in some regions of more than forty leagues. From all that can be collected concerning these *Mau-lao*, who infest six provinces of the empire, it results that they are no less savage than the *Worrou*s of Guiana in America.

Europeans hold it almost impossible, that in China so many hordes of men should be found, who are

* Description de l'Empire de la Chine, tom. i.

incapable even of understanding each other : but when we know that the country is so irregularly inhabited, the existence of savages is as easily conceived as that of wild beasts.

By casting an eye on the best maps of China, we observe the interior country wonderfully destitute of geographical details : and yet, to prevent this as much as possible, every little village is inserted as a town. Different enumerations of the walled cities in China have been collected, without mentioning those of Kircher and Couplet, who have copied almost word for word the Atlas of Martini *. Mendoza makes the total number of such places amount to one thousand six hundred and seventy-four ; but in this he must be mistaken. The Jesuits, who compiled the map, do not suppose them exceeding one thousand four hundred and fifty-three ; and this indeed is very surprising. Such an empire, in proportion to its prodigious extent, should contain at least fifteen thousand walled towns ; and if Holland and Brabant were taken as a standard of comparison, the number would be considerably augmented.

Among the most desert provinces, the reader should be made to remark *Koei-tcheou*, where the necessities of life might be rendered sufficiently abundant, says Father du Halde, if the lands were better cultivated †. Yes, without doubt, by improving the

* Kircher, *China Illustrata* ; and Couplet, *Tabula Chronologica Sinicae Monarch.*

† Description de la Chine, tom i.

country,

country, it might be rendered habitable; but the Chinese have no inclination to live there.

In order to gain more by fishing, navigation, and manufactures, they establish themselves along the sea-coasts and the banks of the rivers. To traffick with greater advantage, they crowd together in the capital, and the towns best situated for commerce. Thus their country must have appeared seven times more peopled than it really was to those who saw nothing more than their rivers and towns. This explains at once the cause of infanticide, and the frequent and horrible ravages occasioned there by famines*.

As they multiply in some places, and abandon others entirely, it frequently happens that the extent of country, though cultivated with the greatest industry, is altogether inadequate to the number of inhabitants. Whenever the harvest fails, all the supernumeraries, who do not fly to other districts, must perish. Those, who have the means of escaping, swarm to spots where nature has been more bountiful; and occasion disorders there, of which we cannot form any idea, because we see no example.

Mr. Osbeck, who chanced to be in China in the year one thousand seven hundred and fifty-one, says, that the province of Canton was still overcharged with a multitude of wandering families, driven by hunger from the centre of the empire, where death had carried off a prodigious number†. Either Father Parrenin was totally ignorant of the interior provinces, from having followed

* Coutencin, Extracts from the Chinese Gazettes.

† Osbeck, Reise nach Ostindien und China.

the ordinary roads, or he wished, in his letters to Mr. Mairan, to conceal the wretched state of cultivation. He would have us to believe that the emperor and the mandarins take very good measures at times to diminish population. By occasioning a total want of aliments, they sacrifice seven or eight hundred thousand victims to the public tranquillity. This detestable policy, we may venture to affirm, is a mere invention; for the greatest troubles are produced by such famines when hunger drives the inhabitants of one province to attack their neighbours, and even to eat them, as frequently happens in China. No shadow of authority any longer remains on these melancholy occasions, and every sentiment of commiseration is so completely destroyed, that fathers have been seen feeding on their own children! It would, therefore, be as absurd as contradictory in the sovereign and governors, who do all in their power to preserve tranquillity, to intercept the food of the people, that they may revolt, and put the lives of their rulers in jeopardy. In arbitrary governments the cause of every disaster is attributed to the despot. The Chinese make their emperors responsible for the devastations committed by the very locusts. This must be the case in every despotic state, where the Deity is neglected for the prince, who endeavours continually to usurp the rights of the Creator.

On the other hand, Father Parrenin considers the distillation of rice, to make what is called *arrack*, among the causes of famine. By this we perceive how ill the man was informed; for that liquor is never made

made in China. *Sampsu*, a drink much weaker, is used there, but in great moderation; and travellers agree that they never saw one single intoxicated person in the streets of Canton. Grain is consumed in a very different manner throughout Europe, not only by distillation, but in brewing beer. Yet this consumption has never produced any famines like those in China, where the men are impelled to devour each other. It cannot be too often repeated, that the real cause of all these evils consists in the total deficiency of cultivation in the centre of the provinces.

It may appear strange that no attempts have been made to establish magazines in all the governments; but, besides the difficulty of filling them, the police of China is too weak, and the army not sufficiently disciplined, to protect such storehouses against robbers and wanderers, who might be induced to pillage. On another hand, the exterior commerce, by means of which, in times of scarcity, supplies of rice might be drawn from India and Java, has not been properly directed. Never was the life of a single person preserved there by any such precaution. The Tartar troops, maintained by the emperors of the present dynasty in Peking and its environs, protect indeed the stores of provisions destined to supply the capital*; but the Tartars have not the means of establishing the same order in all the provinces, because they could never succeed, even by the most violent measures, to render the country uniformly inhabited.

* Description of Peking, by Messrs. de l'Isle and Pingré.

These conquerors, on their arrival in China, were astonished at the abuses existing there: they observed particularly the numberless inconveniences arising from the irregularity of the cantons, many of which were too much peopled, others insufficiently, and some not at all. They conceived the evil to exist in maritime commerce, and still more in piracy, which attracted to the coasts all the families from the inland regions, where the soil remained uncultivated. On this they adopted two very extraordinary measures for correcting the evil in its source: they prohibited navigation in the first place, and afterwards demolished, in six provinces, all the habitations within eight miles of the sea *.

When these districts were ruined, the families had to retire further into the country, where they lodged in holes dug in the earth, like those Troglodytes who are found so numerous in different parts of China. Such beings could never have been supposed to exist there; but the inconceivable misery of the people at a distance from the great towns, who are constantly exposed to be pillaged by robbers, does not permit them to construct houses.

As the Tartars began to relax in their prohibition of fishing and commerce, the people, who had been compelled to retire, abandoned their caves and cells to approach the shores. All the colonies, sent into

* The plan was adopted during the minority of *Can-hi* by his Tartar tutors. Canton was likewise to have been destroyed; but particular motives prevented it from sharing the fate of the other towns.

the deserts to discharge the towns of their surplus of population, desert in the same manner ; because they have no disciplined troops to protect them at their first establishment. From the confession of the Jesuits themselves it appears, that several attempts have been made to people and cultivate *Koei-tcheou*, by sending thither colonies and governors with their families. The vice was too deep in the principles of the government to admit of any remedy ; and all these measures were as useless as the sermons of the mandarins and men of letters, who exhort the people frequently to clear the soil* ; but they take at the same time no care to cut their long nails, which form a strange contrast with their maxims. Were even the hopes of gain insufficient to attract the multitude towards the great commercial towns, the dread of losing their all in one night could not fail to render the people of the distant cantons very unhappy. *All the Chinese villages*, says Father Fontaney in his journal, *through which I passed on that day, had a house resembling a small tower, where they placed their effects for security in troublesome times, and when they feared the irruption of robbers.* If these attacks are so much to be dreaded in the centre of the empire and on the great roads, we may be assured that little safety can be found in solitary places. Even in the environs of Canton strangers cannot travel without danger ; and a botanist from Europe, while collect-

* Memoirs of a great Mandarin, in the xxist Collection of Edifying Letters.

ing plants, was attacked twice in one day by Chinese banditti, who wanted to take away his very shoe-buckles, which would not have happened to him in traversing a camp of Bedouin Arabs. All these circumstances confirm, unfortunately but too much, the relations of Lord Anson and Captain Congrel.

If China were regularly inhabited, without having either so many thieves, begging monks, eunuchs, or slaves, the human species must soon increase astonishingly, from the fecundity of the women in the southern provinces, and the nature of the climate in general. So many inconveniencies, and some of them far from trifling, have not prevented population from amounting, according to some calculators, to eighty-two millions. This estimate most probably is exaggerated; but supposing it to be just, China is still much less peopled, in proportion to its size, than Germany *. It would be absurd not to pay attention to the difference of extent in the two countries, when the one does not in reality exceed the sixth part of the other. As in China nothing is used for fuel but fossil coal, called *moru-y*, it seems natural to suppose that such a country might admit of more inhabitants than others, where wood alone is employed, and consequently much soil covered with forests. In Scotland, and round Liège, the fields are tilled above the very coal-pits; but this advantage

* This would be the case were Germany supposed to contain only nineteen millions of inhabitants instead of twenty-four millions, which is the calculation of Mr. Süssmilch in the second volume of his work.

does not seem to have influenced the population of China, where, in almost all the governments, vast districts, of more than sixty miles in length, remain totally uncultivated; and a smaller extent might more than suffice for wood, if nothing besides could be found for fuel.

As neither the laws nor institutions of China have any connexion with the salubrity of the air, they are very different from those of Egypt, which related so immediately to climate, and to the constitution of the inhabitants. This will appear more striking in the following Section on the dietetic regimen of ancient Egypt. Little attention must be paid to those, who pretend, that the Chinese can dispense with such precautions, because they are never attacked by the plague; for it is known, that, in the year one thousand five hundred and four, this scourge made horrible ravages. In the year one thousand three hundred and forty-seven, the *black pestilence*, the most dreadful in the history of the world, broke out in the southern provinces of China *, over-ran all Asia, and infected the whole of Europe. As no police had been established in those days of confusion, it penetrated into Greenland, and thence to the pole, without interruption. The rigorous cold of the arctic regions gave it additional force, because all burning fevers are most fatal in the north; and two-thirds of the human race disappeared then from the globe.

* Mezerai's History of the Huns, vol. v.; and History of Greenland, by Egedius.

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The Egyptians, who corrected greatly the climate of their country, had to take precautions against two great evils; the plague and the leprosy. It is allowed in general at this day, that their method of preventing the leprosy was very efficacious. Thus the Greeks of Alexandria, by supposing they could dispense with all rules respecting aliments, suffered so exceedingly, that the greater part of the troops commanded by Cleopatra and Mark Antony at the battle of Actium, may be supposed to have been infected with the elephantiasis.

With regard to the institutions of the Egyptians for preventing the plague, they seem to have been as effectual as their regimen respecting the leprosy*. Physicians abounded every-where, and the country really required to be well provided with medical assistance. When it was intended to check the disorder as soon as it appeared, the only method was to watch every-where: yet, as experience has shewn that during the plague a vigilant and regular police is more effectual than medicines, we can conceive why the laws had so much restrained the power

* Horace alluded to the elephantiasis when he spoke thus of Cleopatra:

—*dum Capitolio*
Regina dementes ruinas,
Funus et imperio parabat,
Contaminato cum grege turpium
Morbo vivorum.

He was far from saying this of the venereal disorder, as some commentators, destitute of understanding, have pretended.

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of physicians. It was feared that their inclination for trying new remedies might prevent those measures, the effects of which were certain against maladies always attended with the same appearances. This has been considered as very ridiculous by some modern authors, who say, that to limit the practice of physicians is the height of folly; but in fact nothing was more sagacious.

We know that the ancient Egyptians were very attentive to the canals of the Nile; and as care was taken that the water should run off freely, they did not grow corrupt, as frequently happens now in many places, from the astonishing negligence of the Turks and Arabs *. Were we to observe here all that has been omitted by these two nations, and every thing they should have done, it would be easy to conceive how a country, formerly not altogether unhealthy, is become at the present day the hot-bed of the plague. This disorder, we should observe, is not produced by famine, as some travellers, and particularly the Abbé Fourmont, have asserted. By exact annotations continued during twenty-eight years, we find, that it has raged five times, without-being preceded by any scarcity of food, and contrary to what I once suspected, unrestricted to a periodical course. Another epidemical disorder, no less terrible, is brought at times to Cairo by the Nubian caravans, because they have never been subjected by

Note

* *Unde aer longe insalubrior quam antea redditus est, præsertim mense Augusto, ob aquam quæ stagnans atque semi putris est.* Prosper Alpin. *Rerum Ægyptiac. lib. i.*

the Turks to any kind of quarantine. Anciently, that is to say before the Persian conquest, no authors have observed that these caravans ever arrived at Memphis; but since that epoch, according to all historians, two dreadful plagues proceeded from Nubia, or Ethiopia.

Neither men nor beasts are any longer embalmed in Egypt; and the ancient Egyptians seem to have been in the right to follow this mode, as well as to keep the mummies very deep in excavated rocks. Some have supposed, that more putrefaction and inconvenience resulted from their manner of embalming, than from inhumation: but, on reflecting, it is easy to conceive the contrary; because the entrails of very few bodies were thrown into the Nile. All the others were immediately placed in *natron*, or fixed alkali, and injected.

Another circumstance equally certain is, that rice was totally unknown to the Egyptians: and had this not been the case, they would never have brought it into cultivation. More than four hundred thousand sacks are now exported yearly from Damietta; and this alone suffices to occasion disorders in a country where thunder is seldom heard; and the atmosphere, impregnated with saline substances unconsumed by the fire of heaven, is very subject to become noxious*. Thus on the smallest appearance
of

* In the year 1680 a plague, brought most probably from Egypt, carried off fifty thousand persons in Vienna and its neighbourhood. The physician of the empress Eleanor, having distilled

of contagion, the ancient Egyptians kindled fires, distributed in a manner now unknown. They were the inventors of the method adopted by the Sicilian Acron, in the plague of Peloponnesus; and we see clearly that the Greek physicians, who followed him, possessed no other secret. Sometimes indeed they set vast forests in flames, to save small cantons; but when fires are well distributed, and kept up with resinous substances, they produce more effect than the burning of a wood. The virtue of this method is very far from consisting in the absorbing quality of the ashes, or their alkali, as a physician has found from his experiments during the plague at Tour-nai.

What proves the necessity of using great and continual precautions in Egypt, to preserve the salubrity of the air, is, that the priests daily at different times practised fumigations in all the towns. It is believed that they were wont, on such occasions, to burn the drug called *cypbi*, of which Plutarch has given the composition, although his account of it does not seem much worthy of credit, any more than that of Dioscorides, because the article seems to have been

distilled the matter of a pestilential boil, obtained an acid as strong as aqua regalis. His experiment however does not assist at all in discovering the origin of the Egyptian plague. From want of rain and thunder in Thebais, the air acquires at times so much violence that it produces a fermentation in the humours of the human body; and the gall appears to be easiest affected. The atoms then exhaled from the sick are like a leaven. Volatile alkali might be used against the disorder in a manner still more efficacious than that adopted during the plague in London.

inter-

interpolated in the writings of this Greek by an ignorant copier *. Oribasus insinuates, that it was taken inwardly, as an antidote to the plague †; and this confirms the idea that he knew nothing of the matter.

We must allow that fumigations were never more frequent in Egypt, than they are now in the towns of China: but this usage has been introduced by the worship of the Indian god *Fo*; for it is before such divinities, that every evening so much incense and so many sticks of scrapings of white sandal are consumed, that the smoke in every quarter of the town resembles a thick fog. Some have supposed, that this produces the dreadful disorder in the eyes, to which the Chinese are so subject, that blind beggars and prostitutes are seen every-where, as we learn from Mendoza ‡. This however can never be considered as the real cause of the Chinese ophthalmia, attributed by several travellers to the quantities of rice used as aliment, when in fact a more natural cause presents itself in the exhalations from the swamps where that grain is cultivated: others believe with more reason, that the brutal incontinence of the people, and the constant and universal practice of washing the face with warm water, tends to weaken

* This does not seem to have been a perfume, but a factitious balm resembling the *myron* of the Copts, who employ it for superstitious purposes.

† De Simpl. lib. v.

‡ Hist. della China da Gonzalez di Mendoza, lib. iii.; and also Torrens, Reise, briefe v.

the optic organs; but more shall be said of this hereafter.

It is without doubt by the greatest chance in the world, that a similar disorder has ever, even to this day, continued to affect the inhabitants of Egypt, who suppose it to proceed from nitre in the air, and those burning winds called typhonic by the ancients, but known to the moderns by the name of *meriffi*, *faliel*, or more especially *champsin* *. These whirlwinds waft about a fine sand, so warm, that it wounds the lachrymal glands, and the retina of the eye, like flying fire.

This was generally believed until the year one thousand seven hundred and fifty-one, when Mr. Hasselquist undertook to make inquiries at Cairo, concerning this matter; and his opinion is, that it proceeds from the vapours of the common-sewers †. But in reflecting, that Egypt in ancient times possessed so many physician-oculists, whose reputation was established throughout the world, it is difficult to imagine, that they could be ignorant of the cause of this disorder. They could not attribute it to the exhalations of the conduits, because they are grown dangerous solely from the detestable police of the Turks and Arabs, who may be considered as the authors of the plague. They suffer it, if we may use the expression, to grow under their feet; and, with-

* Fourmont's Description of the Plain of Heliopolis; Theronot's Journal, vol. ii.; Vansleb's Travels; De Bruyn's Reisen; and Prosper Alpin de Rebus Egypt.

† Reise nach Palestina und Egypt, band ii.

out attempting any remedy, they expose Europe and Asia to its annual ravages.

The Chinese, who stand so much in need of oculists, have none at all; and their regulations with regard to the blind, whatever may be said in their favor, are certainly not the best. They allow them to beg, or to live by prostitution, under the pretext that those women who have lost their sight, are incapable of gaining their bread by any other mode than this, which leads in the end to beggary.

Among the Egyptians, says the emperor Adrian, *I have observed that every person is employed: the blind work, and even those who have the gout are not idle.* This police was necessary in a country where the weak-sighted have ever been, and perhaps may always continue to be, very numerous. Cornelius Bruyn believes, that the fourth of the inhabitants of that country are afflicted with partial or total blindness.

After what has been said, concerning the mode of preventing or diminishing contagious disorders, we perceive that the plague could not affect population beyond a certain degree, which we shall endeavour to determine; but, to be better understood, it is necessary to enter into some discussions.

Although Egypt, in point of agriculture, is less desolate than any other province subjected to the absurd government of the Turks, yet, whatever some ill-informed travellers may say to the contrary, the extent of soil in a state of cultivation there, at this day, is by far less considerable than in former times.

All

All the rice and wheat now exported annually, cannot be justly supposed to exceed twelve millions of Roman measures; and Augustus took thence twenty millions every year, at a time when population was far greater than at present, and consequently more grain must have been required for internal consumption. From the borders of the lake *Merotis*, to the tower of the Arabs, the country represented by Strabo as exceedingly populous, is now very desert; and Mr. Hasselquist found whole fields, apparently well adapted for tillage, over-run with that pernicious herb, vulgarly called rest-harrow, but in the language of botany, *anonis spinosa*. With regard to the Thebais, it is beyond comparison more desolate than the Delta: yet some error may be suspected in the commentaries of Pancirole, when he mentions that the emperor Justinian drew annually from Egypt forty-eight millions of Roman measures of wheat, or eight millions of Attic medimni*. Perhaps indeed the towns there were already desert, while the country was cultivated by agents. This might have happened in the time of the lower empire, when the avidity of the princes made them overturn the state by continually augmenting their domains. Sovereigns should never be allowed to heap together without end; for when no limits are placed to their acquisitions, all is lost. In vain did Honorius issue the most dreadful laws, ordaining those to be com-

* It is possible that the Egyptian measure *artabe*, used on such occasions, is wrongly estimated by Suidas, who makes it equal to the Attic medimnus.

mitted instantly to the flames, who dared to pierce a dike on the Nile *. All his menaces could not prevent the destruction of a country, where the inhabitants were pillaged of their property. Something of the same nature took place under those ferocious usurpers, called the shepherd kings ; but long after their expulsion Sesostris restored the lands to their owners, and this is the reason why the Egyptians adored that prince, who repaired the evils committed during the reign of the most cruel tyrants †.

It would seem that in a country almost without rain like Egypt, the surface of spots somewhat elevated must be converted into moving sand, if left for a century without cultivation : for the salts, as well as animal and vegetable particles, which form what is called soil, are consumed, and dissipated by the extreme heat and want of moisture. The Caloyers and Greek monks have formed some admirable gardens in Arabia Petrea ; but fifty years would probably be sufficient to make all the vegetable earth disappear on those spots, if no longer watered and cultivated. Thus we find that when Mahommed, foudan of the Mamelukes of Captchak, endeavoured to re-establish agriculture in Egypt, he was obliged to have the moving sand removed from the surface. In estimating therefore the square miles of arable

* This edict of Honorius concurs with many other facts in proving that the *drab* or Egyptian cubit now used on the Nilometer of Cairo does not agree exactly with the ancient cubit.

† Herodotus may be consulted when speaking of the division of lands made by Sesostris.

land contained in that country, some sandy spots may justly be included, which formerly were rendered fertile. What Count Caylus and some others have believed concerning this matter, does not merit much attention ; *for never having made a particular study of geography, they could not attain any degree of precision.

Mr. d'Anville, in his *Memoirs on ancient and modern Egypt*, assures us, that by a calculation made on his maps, he finds that all the surface of that country capable of tillage, never exceeded two thousand, or at most twenty-one hundred square leagues, of twenty-five to a degree ; and thus, in his opinion, Egypt was only equivalent to the twelfth part of France. But every reasonable person will allow, that this supposition is not at all just ; because it admits only of the fertile part of Egypt, and includes the whole of France in general. The forests, the heaths, the sand-hills, and barren wilds near Bourdeaux, should at least have been excepted, as they are in no respect preferable to the higher parts of Thebais, where the Bedouin Arabs find some scanty pasturage for their horses.

From all these facts we perceive how prodigiously the extent and population of Egypt have been exaggerated ; but more particularly by Mr. Goguet, who supposes it to have contained twenty-seven millions of inhabitants under the Pharaohs *. Ancient

* According to the most exact researches, Egypt contained twenty-seven millions of inhabitants under its first kings. *Origin of Laws and Arts*, vol. iii.

and modern history are full of such extravagancies; and, in proportion as they are destroyed, new truths spring up in their stead.

By the utmost efforts of industry, the ancient Egyptians rendered nearly two thousand two hundred and fifty square leagues productive; including the *Oases* and some elevated spots, like those around *Alabastranopolis* sixty miles distant from the Nile, where the ruins of that place are still visible: from this must be deducted the sites of towns, the fields sown with flax, and other secondary objects of tillage; but the maintenance of the sacred animals does not appear of sufficient consequence to be mentioned. Yet, as in warm countries the earth produces much, and people eat little, one square league may suffice for a greater number than in cold climates, where the soil is less fertile, and the inhabitants require more food. Thus Egypt might anciently have contained four millions of inhabitants; and we must consider as inadmissible all that has been advanced on that matter by Diodorus Siculus, and the Jew Flavius Josephus. Population diminished there under the Persians, who governed always with a rod of iron; and still more when the latter Ptolemies ruined, in one day, what had cost years of care to the three first Lagidæ, who indeed deserved to be called kings. But all their successors were robbers, or idiots, who neglected every thing, even to keep in repair the canals of the Nile, which the Romans, as soon as they conquered Egypt, restored to their former state, and rendered the country more fertile than it had

had been under the reign of Cleopatra, or her father Auletes, who was the model of bad princes.

We pass over all the reasonings of those, who pretend that the inundations of the Nile extended farther in ancient times than at present; because, according to them, the quantity of mud must have raised the soil some feet higher. But this cannot be proved evidently. If it be admitted that the Mediterranean decreases, either from gulfs opening in its basin, or by the return of the waters to the south pole, then we may easily conceive how the *Delta* might have become somewhat more extensive, although the Nile had contributed nothing. It is besides essential to observe here, that Mr. Maillet has carried beyond all probability his ideas relative to the augmentation of the *Delta*; because he is deceived in believing the present Damietta to be the same that had a harbour on the Mediterranean in the days of St. Lewis. But this is a new town, built farther inland by the Mamelukes, immediately after the former had been demolished by repeated ravages during the crusades. If we cannot readily excuse Mr. Maillet for being surprised into such an error, those Greek authors are infinitely more to blame, who have placed thirty thousand towns in ancient Egypt. All the villages in France, including even the smallest, do not amount to more than thirty-nine thousand, although, as we have seen, no comparison can be made between the extent of that country and of Egypt. It is not probable that any error has slipped into the numerical words of Diodorus Siculus; for

we find his most extravagant estimate to be exactly conformable to that of Theocritus, who built the greater part of those towns in an idyl *. This he did to flatter shamefully Philadelphus, who was exceedingly rich, and Theocritus is known to have been very poor. We may therefore well suppose how much flattery poverty could make any poet utter, and particularly a Greek. But it was carrying the marvelous to its height, to maintain afterwards, that Philadelphus added three hundred more towns to the thirty thousand already in his dominions: while we know perfectly how much difficulty attended the peopling of Alexandria, or rather the place called *Racotis*, which Alexander augmented and beautified. Whatever Quintus Curtius may say to the contrary, it is certain that the first of the Ptolemies invited the Jews thither; and those, who are acquainted with that nation, will readily conceive, that recourse was not had to them, until all other applications were ineffectual.

Egypt contains, at this day, about two thousand five hundred towns and villages: if we suppose double

* Idyl. xvii. Theocritus is not to be excused by supposing that he spoke of all the dominions of Ptolemy Philadelphus in general. In the different texts of Diodorus Siculus, those where we read *three thousand towns* are faulty, and those should be followed where they are written *thirty thousand*. Such was undoubtedly the meaning of that author, as we find by the preceding sentence. He begins by saying that anciently eighteen thousand towns were counted in Egypt; and it would be absurd to add that three thousand existed in the reign of Ptolemy Lagus. In both cases however he has exaggerated shamefully.

that

that number to have existed in its greatest prosperity, the estimate would be rather above than below the truth; for a country must have suffered miserable treatment indeed to be reduced to one half of its inhabitants. Without being much versed in ancient geography, any person can conceive that few names are on record of the amazing number of Egyptian towns talked of by injudicious authors, and we shall not attempt to push back the rocks of Thebais, or remove the sands of Libya, to make room for the habitations imagined by Herodotus, Theocritus, Diodorus, and those who have copied them without judgment.

Before we terminate this Section, it will be proper to make some observations on the fruitfulness of the Egyptian women; concerning which, the ancients have spoken so much, attributing it to the virtues of the Nile. The water of this river has been several times analyzed; and from every experiment, it appears to contain a salt, which may be considered as the cause of a disorder to be mentioned hereafter. As a vein, parting from the emulgent, conducts all nitrous serosities, and even alkaline substances, to the reins, the water of the Nile possesses a stimulating quality both with regard to men and beasts. To this is reduced the whole prodigy; for we must not believe any effects were ever produced, nearly so astonishing as some have pretended. If it appears from different historians, that anciently the water of this river was carried into very distant countries, particularly for the princesses descended from the Ptolemies, and married to strangers, it was not for the

purpose of drinking it with the idea of preventing sterility, but merely to sprinkle the temples of Isis. This is not a matter of conjecture, for the fact is evident from a formal passage of Juvenal *.

Aristotle has asserted, that the water of the Nile requires only half the common degree of heat necessary for ebullition; but the experiment is so very difficult, that we may be assured no physician of antiquity had instruments sufficiently perfect for the purpose. Yet, on this assertion, Trogus Pompeius, Columella, Pliny, Athenæus, Phlegon, and the lawyer Paul, have apparently founded all they have written on this subject, copying each other constantly, and never making any observation.

The water of the Nile has not changed its nature, and yet the women no longer bear four children at a birth, and much less seven, as Phlegon has ventured to affirm, after the example of Aristotle. It was considered as a prodigy at Cairo, that a Turk, in one thousand seven hundred and fifty-one, who had eight wives, became the father of eighty children in ten years. This fact, which appeared so strange in Egypt, might very easily happen in Europe, if polygamists were found there as determined as this Musulman. Besides, it should be observed, that in Egypt, as in all warm countries, the women leave off child-bearing sooner than in temperate climates; and in this manner nature, if we may use the expression,

* *Ibit ad Ægypti sinem, calidaque petitas*

A Meroe portabit aquas, ut spargat in ædem

Isidis, antiquo quæ proxima surgit ovili Juven. Sat. vi.

counterbalances itself. We know beyond a doubt that the Egyptian women neither use natron, nor any other alkaline salt, as an antidote to sterility. They employ however for that purpose, different compositions, described by Prosper Alpin; but he has not noticed the most violent of all, which is an infusion of cloves and the gall of crocodiles. All parts of that animal are known to be aphroditical; but the gall and the eyes have more efficacy than the rest of the body. Another thing, equally certain, is, that the Egyptians did not drink, habitually, the water of the Nile; for they prepared a liquor, called *zythum* by historians, of which we shall speak more fully in the next Section,

SECT. II.

ON THE REGULATED DIET OF THE EGYPTIANS.

THIS Section is appropriated to a very important subject, which will discover many striking differences between the ancient Egyptians and Chinese. Those two nations, as we have already observed, practised alike the hatching of eggs; but the facts, which we have to cite, are sufficient to prove that this conformity was entirely owing to chance.

To form precise ideas on a matter so long confused, it is necessary to remark, that three different systems of regimen were anciently established in Egypt: the first was confined to the priests; the second did not extend beyond certain towns or prefectures; and the third included the whole nation, without permitting any particular customs to derogate from the universal law. In latter times some deviation must have taken place, when the national institutions had lost their force, by an infinity of evils attending the conquest.

From these three systems are derived those of the Hebrews, and of the disciples of Pythagoras. The Jewish legislator conformed himself much to the inclinations of his people, and still more to the climate. He would not allow the Levites to be distinguished, in their diet, from the other tribes, who were all subject to the same rules; and he rejected a number of Egyptian practices, as too extensive for his purpose. But this was not the case with

with Pythagoras, whose alimentary system, ill-imagined, discovers more of the founder of an order, than of the philosopher. Thus we find a ridiculous author maintaining that this Italian had been a monk at mount Carmel; and some holy fathers have suspected him of conforming to Judaism, which is nearly the same thing. Before we proceed further, it will be necessary to explain in a few words the great error of Pythagoras. He began by visiting Egypt; and after getting himself circumcised, he adopted the regimen of the priests, without inquiring into the cause of their aversion to fish, and to various kinds of vegetables: afterwards he repaired to India, where the laws and religion had likewise established a dietetic system conformable to the nature of the climate. But in the course of seventeen or eighteen centuries, it seems to have undergone some changes, not necessary to be mentioned here. Arrived at Hindoostan, he complied fervilely with the rules of the Bramins, by abstaining from the flesh of animals, particularly that of calves, although at his circumcision nothing of the kind was enjoined by the priests of Egypt. Of all these rites, which, as we have observed, are very contradictory, he composed a monstrous mixture, without perceiving that many things, adapted to the south of Asia and a part of Africa, were totally unfit for Europe. This man, instead of studying the productions and diseases of each country, yielded always to prejudice, and being guided constantly by authority, he was governed during his whole life by the ideas

of others. Independently of the despotic tone, introduced by him into philosophy, his disciples became unsocial, even from their diet, because they could not eat at the table of their fellow-citizens. Thus, that sect disappeared from the face of the earth; and although Apollonius Thyaneus preached a great deal, he died without imitators.

The more we reflect on the diet of the priests in Egypt, the clearer it appears, that they endeavoured chiefly to avoid the leprosy of the body, the sporophthalmy, and the gonorrhea, which in their country is more or less connected with the two former indispositions. By these they would have been rendered incapable of exercising their functions; and as they required to be purer than others, they abstained from many things, considered as perfectly allowable with the people.

It has been observed, that the modern Greeks, from consuming, in conformity with their religion, great quantities of fish, are more subject to the leprosy than the Turks, who live chiefly on flesh. This observation is verified among the different races of ichthyophagi, the nature of whose food evidently produces disorders of the skin.

Thus instructed by experience, the Egyptian priests renounced the use of fish of every kind, either with or without scales. But they had a particular aversion to those of the Mediterranean; as we find by many passages, and above all by the symbols of Pythagoras collected by Gyraldus*. Exclusive of

* Gregor. Gyraldus de Symbolis Pythagoræ.

the general law, the scar or char, the roach, and the sea-nettle, which are not found in the Nile, were expressly prohibited.

The moving sea-nettle is not properly a fish. It has been ranged by the ancients among the zoophytes, and by the moderns among worms: but to whatever class it belongs, no food can be more pernicious to those who are attacked with the phlyctæna, or false gonorrhea.

The priests of Egypt were the first who suggested that the scar ruminates; and until this day no naturalist has been able to contradict them on that article. From this we may infer, that their researches into the productions of animated nature had been very extensive; but unfortunately they are frequently enveloped in so many enigmas, that we almost despair of ever being able to dispel their obscurity.

Certain Greek authors, speaking of the roach of Pythagoras, call it more positively *triglia*, which indicates the red mullet, purchased at so high a price by the Romans for their table, as well as for the pleasure of seeing it expire. Its body exhibits the most astonishing vivacity of different colors, in proportion as the blood ceases to circulate. It was not however allowed to be eaten, by the initiated, at the mysteries of Eleusis; because it was suspected to devour sea-hares. By this food they fancied it might be rendered poisonous, without being destroyed*, as we find to be the case when certain

* Iunius de Esu Piscium, cap. xxii.

fish in the American seas have tasted the manchineel apple. With regard to the redness of the fins, which gives it some resemblance to the typhon, this allegory, purely Egyptian, has been extended to the perch and spar, as we shall find in treating particularly of the regimen of the provinces, or Nomes.

The opinion has been almost generally adopted, that the priests of Egypt never used salt to their food. We know to a certainty that they abstained from what was produced by the water of the Mediterranean, and the lakes of the Nitriatic Nome, where, besides the natron, a common salt was likewise found, according to the observations of Father Sicard.

The dread of being infected with the phlyctæna must have made the priests reject from their regimen every thing strongly impregnated with salt. Nothing can be more obvious than the meaning of their fable concerning Nephtys, or the Cytherean Venus, who, according to them, was produced by the froth of the sea. Yet finding it almost impossible to live on food perfectly insipid, they employed in small quantities a kind of rock-salt brought, as Arrian says, from Marmarica*. It came however more probably from the part of Ethiopia, called Abyssinia by the moderns, where that fossil is found in great abundance at the present day. If they believed this species of salt to

* De Expeditione Alexandri, lib. iii.

be less pernicious, in such cases, than that of the sea, they had either made observations, to us unknown, or they were grossly deceived. From this however we may conclude, that no particular law prohibited the sacerdotal order from tasting any thing, because it was not produced in Egypt: and we have another proof in the great quantity of olive oil imported constantly from Attica. Plato had a ship entirely loaden with this article*, for the purpose, we may suppose, of paying the priests of Heliopolis, who afforded him philosophical information. The Egyptians used many different kinds of oil, extracted from the grain of such plants as the sesame, the palma-christi, the carthamus, or *cnicus* of the ancients, the rape, and even the nettle. Of the latter they had extensive fields, and the same thing might perhaps be practised successfully in Europe, where most probably it has never been attempted†. Yet all these oils without exception were considered by the priests as unwholesome; and according to Porphyry, they rejected them almost entirely. But their opinion was very different respecting the oil of olives, brought from Judea and Attica; for the soil of Egypt has ever been unfavorable to olive-trees, except in a few

* Plutarch in his life of Solon.

† The seed of the great nettle, *Urtica urens, maxima, femine lini*, contains an oil superior in quality to that of rape-seed. The Egyptians used the oil of carthamus and palma-christi only in exterior applications. The plant which in their language is called *selepson* differs in nothing from a nettle common in Europe.

cantons to the westward of a place now called Benisuef, and at Abydas in Thebais.

An article now presents itself very difficult to be explained, because some authors have endeavoured to persuade us, that abstinence from wine was never rigorously observed by those who filled the chief offices in the sacerdotal class. This, however, is certainly a mistake. Egypt had no vineyards, previous to the shepherd kings, or Arabian conquerors, who planted vines, and drank the juice of the grape at their tables, in opposition to the laws of the conquered. After the expulsion of those usurpers, the ancient custom was re-established of never giving wine to the Pharaohs; and it continued until the reign of Psammetichus, who had the greatest predilection for the manners of Greece. He preferred them to those of his own country, where sobriety was not regarded merely as a virtue, but as the first duty of a sovereign. Thus all was lost beyond resource, when the luxury of an Egyptian king equalled that of an emperor of Persia.

Pythagoras, who never reflected on the eligibility of any thing, adopted, without restriction, for himself and his disciples, the Egyptian regimen which prohibited the use of wine. Moses, on the contrary, indulged the Hebrews with this liquor. They resembled greatly those Arabian shepherds we have mentioned, who were always passionately fond of wine, although its effects are in every sense pernicious, particularly in warm countries infected with the leprosy, and with despotism. More dreadful instances

Instances of cruelty are not to be found in history than those committed during the drunkenness of the Persian sultans, from Alexander to Solymán the Third. The weakness of ministers is no excuse for their not preventing the execution of orders given by madmen, or furious beasts; for no better name can be given to drunken despots.

According to every appearance, the priests opposed invariably the culture of the vine in Egypt, and even caused it to be rooted out. Such princes as Psammeticus and Amasis, who preserved a close communication with Greece, could easily procure, by the way of Naucratis, sufficient wine for their courts, although none was produced in their dominions, as we learn from Herodotus, who visited that country. Thus, when Athenæus affirms, that the town of Anthylla, and the vineyards round it, were the dowry of the queens of Egypt, he is grossly deceived. That place never belonged to the queens. After the conquest of Cambyses, indeed, it was assigned to the empresses of Persia, and received the name of Gynecopolis or the Town of Women, which has ever since been adopted in history, as well as in geography. Under the Ptolemies, the culture of the vine was again introduced, and continued under the Romans, until the conquest of the Kaliphs, who caused it to cease; and it has never since been re-established. The opinion of the priests concerning the dangerous consequences of using wine, in a climate like theirs, is justified by the example of the greater

part

part of the nations inhabiting northern Africa. The Jactanite Arabs, who should always be carefully distinguished from the Mostarabs and the Hebrews, conformed to this general rule, long before the birth of Mahomet. The commentators of the Koran have been little scrupulous however, in the absurd accounts forged by them relative to this matter *. In the *Treatise on Abstinence*, written by Porphyry, we find the priests of Egypt represented as maintaining, that the use of wine is detrimental to learned men and to philosophers †. They persisted in this idea, most probably because their chief pursuits were directed to geometry and astronomy, which require great presence of mind. Indeed we can scarcely suppose that important discoveries can be made in such sciences, by those who drink wine freely while employed in study.

From many passages in different ancient authors, we learn, that the flesh of swine was considered most incompatible with the sacerdotal office, although the people were allowed to use it once or twice annually. This animal seems to contain in its formation the principles of leprosy. As a load of fat prevents it from perspiring sufficiently in a warm climate, the blood and humours ferment, and this frequently causes an eruption. Dogs are likewise subject, in the Levant and India, to the same disorder, as well as to the hydrophobia and gonorrhea. They might there-

* Herbelot, Bibliot. Orient. art. Othman.

† This is the reason why the Egyptian priest, named *Calasiris*, in the romance of Heliodorus, constantly refuses to drink wine.

fore be supposed to have been held in still more detestation than swine. But the infalubrity of the former was so far overbalanced by its moral qualities, that this was one of the first animals introduced into the worship of the Egyptians. To suppose the priests ignorant of the danger, would not be doing justice to their penetration. They acknowledge, that those employed in embalming the sacred dogs carried off by madness, became *splenetic*, according to the Greek expression used by the translator of Orus Apollo *. These embalmers, however, could not even approach the chief sacerdotal class, who were men almost inaccessible, and whose precautions were extreme. They washed themselves several times every day, with the infusion of *pesal*, which is undoubtedly hyssop: they neither wore woollen clothes, nor drank the water of the Nile unmixed: their hair, eyebrows, beard, and other parts of the body, were so completely shorn, that we may suppose few instances occurred of their being infected with leprosy. But the greatest difficulty is, to discover what means were used to cure that disorder, when by accident it baffled their precautions. Such authors as have written before our era, afford no information whatever on this important point; and we must descend to the middle of the second century to acquire any satisfactory notions.

* Hieroglyphica, lib. i. Such accidents were not very common, when the Egyptians took care to feed their dogs properly. At this day they are much neglected by the Turks and Arabs; owing to which we find them all more or less attacked with a species of leprosy.

The Greeks of Egypt, having never conformed to any regimen whatever; were at length attacked by the elephantiasis. In consequence of their negligence, it penetrated from the banks of the Nile into Italy. On this the Romans caused some physicians, whom Pliny has taken for Egyptians, to come from the Levant *; but most probably they were Jews of Alexandria, who practised nothing more than the uction, or what is called the cure of Moses. In this operation, the ulcers, seared deeply with hot irons, were converted into scars still more frightful than the disorder itself. As these charlatans insisted on being extravagantly paid, people soon grew tired of them, and of their procedure, which could only be useful in particular cases. It is therefore difficult to be persuaded, that the priests of Egypt did not possess some internal remedy; although the composition of it may have remained long concealed, like so many other inventions in their possession. We find that in different parts of Syria, it was customary with the sick to seek relief from those who performed the sacerdotal functions. This could only have proceeded from an opinion that the priests were in possession of some secret remedies. If any physicians of antiquity can be supposed to have acquired some knowledge of the matter, none had such good opportunities as Aretæus of Cappadocia, and Galen, who remained very long in Egypt. They both agree, that the only method of curing the elephantiasis, without the dreadful application of burning irons, was by

* Hist. Nat. lib. xxvi.

eating the broth and flesh of vipers *. This has been confirmed by Ætius and Paul of Egina, who, from recommending exercise also to the sick, may be said to have carried the practice to perfection †. The ignorance, prevalent in Europe during the crusades, prevented this remedy from ever being tried in the public hospitals, where the leprous were forced to remain sedentary, and the evil increased greatly.

The species of viper most efficacious, is described by Hasselquist, under the generical name of *coluber*. Prodigious numbers are found throughout the whole of Egypt; and the greater part of European pharmacies at this day receive thence by the way of Venice their troches, salts, and other viperine preparations.

The ancient Egyptians, who studied attentively the properties of animals, could not have been ignorant of this virtue in a reptile so common in all the provinces of Thebais, Heptanomis, and Delta. From their observations, most probably is derived the practice continued in some families of Copts and Arabs, of handling vipers, and preparing them in different manners for food. Mr. Shaw informs us, that in the neighbourhood of Grand Cairo more than forty thousand persons feed on serpents ‡. The Turks, he adds, have the greatest veneration for these people; and it is even believed, that a distinguished place is

* Galen, de Simpl. Facul. lib. ii.—Artæus, Curat. diutur. lib. ii.

† *Mirabile elephantiasis remedium viperarum esse existit.* Ætius, lib. iv.—Paulus Ægineta, lib. iv.

‡ Voyage to Barbary.

allotted to them in the procession of the caravan, before the canopy intended to cover the tomb of the prophet. These ophiophagi, or serpent-eaters, have nothing to fear from the bite or sting of venomous reptiles. They seize them with intrepidity, because the mass of their blood is attenuated by an aliment so strongly impregnated with alkaline salt. All these singular customs are neither derived from the Greeks, nor the Arabs; but continued from the remotest ages, they indicate, in some measure, the procedure of the Pfylli. It would not be conclusive to object here, that the veneration of the Egyptians for serpents prevented their being used medicinally; for we see clearly, in the Hieroglyphics of Orus Apollo, that the viper was always distinguished, as very venomous, from the horned adder, which is perfectly innocent *: the latter was revered in Thebais, near the same place where the *herbaji* or *heredy* is now found, the only remains of the ancient worship rendered to beasts in

* What the priests of Egypt have related concerning the *basilisk*, the *aspic*, and the *thermuthis*, is merely allegorical. This deceived the greater part of ancient authors, and particularly Ælian. The serpent *tebham-nasser*, easily known among the hieroglyphics, by the veil under its neck, which it puffs out at will, was the reptile generally taken for the *aspic* of Egypt, as we find from the words of Pliny and Lucan. Yet nothing is more certain, than that the *tebham-nasser* has no venomous qualities, any more than the *ceraste*, concerning which so many fables have been published. The Egyptian viper, was the *aspic* employed by Cleopatra; and the same reptile occasioned the death of the learned Demetrius Phalereus, whose catastrophe is attributed by Cicero to the infamous dynasty of the Ptolemies.

Egypt.

Egypt. The hospitals, built by the Turks of Cairo, for cats and camels, have no such direct connexion with religion as the ceremonies respecting the *heredy*. Paul Lucas has related very extraordinary stories, to persuade other monks, as silly as himself, that this must have been the dæmon Asmodæus, who was banished into upper Egypt in the age of prodigies.

Much light in this matter can never be procured from Leviticus, even by undertaking all the researches proposed by Mr. Michaelis, for the travellers sent by the late king of Denmark into Arabia. The Jews, in the days of Moses, certainly knew no other than exterior remedies against the leprosy. The great use they made of the blood of pigeons, seems less founded on its qualities, than on the knowledge they must have had, that the kings and priests of Egypt, during contagions, were served constantly with those birds at their tables. This, however, was a precaution against the plague, and not to prevent leprosy, as we shall see presently.

Pliny might have suppressed the fable of those murdered children, whose blood was taken to bathe the bodies of the Pharaohs, when attacked by the elephantiasis. Atrocities of that kind are not probable, and above all when imputed to a people too well acquainted with the nature of that endemic disorder, to have recourse to such horrible and useless experiments. Nothing but the cruelty and superstition of Constantine and Louis the Eleventh, could have made some ill-informed historians believe, that these two princes, so much alike in point of character, really

plunged themselves into baths of human blood, as a cure for the itch and the palsy.

Not to interrupt too much the connexion of matter, we will not attempt, till we come to speak of the popular regimen, to develop the motives of the Egyptian priests, for never drinking the water of the Nile; and this will indicate the origin of the elephantiasis, with a kind of certainty not to be found in all that has been written hitherto on the subject. Here we may observe, that according to some authors who wished to find the amount of seven multiplied by six, the persons attached to the sacerdotal class observed a lent of forty-two days: but this seems to be adding erroneously and uselessly two supernumerary days; for, even after deducting them, sufficient traces may be found of the passion for the septenary number. The fast now mentioned, should never be confounded with the mourning of *Apis*, which took place only at the termination of a certain number of years, and had no connexion whatever with the dietetic system.

Some ancient authors, and particularly Apulæus *, have spoken of other Egyptian fasts of ten days only; and the chief rigor attending them, consisted in abstaining from all commerce with women. This excited many complaints in Italy, when the worship of Isis prevailed there, in defiance of all the efforts of the senate. An elegy on this subject still remains, composed by Propertius, who does not use mere poetic licence, as some have believed, when he threatens that goddess with being driven out of

* Metamorph. lib. xi.

Rome *. She was, in reality, banished repeatedly; but her temple, though frequently demolished, was seen as often rising from its ruins.

All these practices, however superfluous in Europe, might not have been unnecessary in Egypt, where certain days of continence and frequent ablutions became indispensable. Mr. Porter, the British ambassador at Constantinople, pretends that bathing is very pernicious, particularly in cold countries; and he informs the Royal Society of London, that, if the Mahometan women have constantly fewer children than the Christians established in Turkey, the cause must be attributed solely to the baths prescribed to the former, and not to the latter. This observation does not appear just in any respect; and it is astonishing, that such reasons should be alleged, when so many others are more obvious. One secret abuse reigns among the greater part of Mahometans, and prevents greatly the propagation of the human species: their theologians have authorised illicit conjunctions in the married state, during the whole year, except in Ramazan or Lent. However contrary this doctrine may be to all the views of nature, a Spanish theologian was on the point of introducing it among his countrymen, because it is the vice of warm climates. But the more an excessive ardor in one sex,

* *Tristia tam redeunt iterum solemnia nobis.
Cynthia jam noctes est operata decem.*

*Que Dea jam cupidos toties divisit amantes.
Quaecunque illa fuit, semper amara fuit, &c.*

and defective organization in the other, impel mankind to this depravity, the greater pains should be taken to restrain them by religion, where the force of civil laws ceases. Thus their pretended theologists, while endeavouring to regulate the morals of man, corrupted his very instinct.

Those, who first composed the Mahometan catechism, exacted from married people almost continual continence during the Ramazan *. Their ideas were borrowed from the ancient Egyptian liturgy, without any variation, except in the exact number of days; and still greater conformity is observable among the institutions of the Copts, or modern Egyptians. Whatever Mr. Sallier may have said, and other travellers repeated, it is not true that the fasts of the Copts continue fifty-five days †. The exact term is forty days; and it may well be believed, that they have preserved, better than all others, the customs of their own country. History, besides, mentions several personages of antiquity, to whom the worship of Isis was not unknown, and their abstinence never exceeded forty days.

At different periods, several false Messiahs have appeared in the world; but the most singular and the least culpable of all, was confined in a mad-house in Holland. This, however, did not diminish his folly as much as had been expected. Having imagined, in one of his fits, that the ancient priests of

* This is particularly expressed in the eighth article of that catechism.

† Traët. Chronolog. de Patriarchis Alexandrinis.

Egypt, during their whole lent, never took any kind of nourishment, he determined to imitate them ; and, according to Mr. Bayle, who announced it to all Europe in his *Nouvelles de la Republique des Lettres* of the year one thousand six hundred and eighty-five, this poor wretch spent forty days and nights without eating. We are not assured, that the philosopher, who doubted of so many things, really believed this fact, which, if true, can only be attributed to the effects of madness ; for all physicians know, that in such cases hunger can be supported astonishingly, as many examples have demonstrated. When the frenzy of enthusiasm makes men believe themselves inspired, or when they pretend to be so through malice, it is then, as we have seen, the wisest conduct in government, to remove them from society. To inflict death on such occasions is always unjust, and often dangerous ; but we may be assured, that a fanatic confined in Bedlam can never have any disciples ; for this treatment brings his judgment and doctrine into such discredit, that even fools would not be his followers. Many nations have never adopted a policy in this respect founded on a knowledge of the human mind ; and the evils resulting from their misconduct have been dreadful.

To conceive what gave rise to an institution so singular as the lent of Egypt, it is necessary to be informed, that during the great heat of summer, even at this day, vegetable food alone is used there in the best houses. All repasts take place either in the morning or evening, when the appetite and bodily

strength are least affected by the ardor of the meridian sun; and in this practice they differ from the greater part of northern nations. It must therefore appear evident, that the priests were directed by the indications of climate, when they added a positive law to a physical want. Sir John Chardin, in speaking of the religion of the Persians, says, *amongst them some believe that the month Ramazan, having happened to take place in the middle of summer, Mahomet ordained that it should be consecrated to fasting.*

The Persians, and many of the Arabs, are ignorant that this, as well as the prohibition of wine, existed long before the birth of Mahomet. The origin of the greater part of religious institutions must be sought for in Egypt; and they are seldom difficult to be found, unless when the total destruction of monuments puts a stop to all inquiry, or the contradictions of authors render facts obscure.

We shall see presently, in what consisted the error of those, who believed that the Egyptians worshipped onions: but here it is sufficient to remark, that the priests alone never used them as food*; because their acrimony, which, however, is less there than in other countries, injures the eyes. The reason, why some mythologists have represented Hercules as constantly rejecting this bulbous plant, has never been rightly understood. That fable appears to have been an allegory, invented by the priests to insinuate obscurely, that such vegetables might be proper for the people, but not for themselves, who were obliged to avoid

* Plutarch de Isid. et Osirid.

every stimulant, which might tend to increase the ophthalmia. Similar reasons induced them to abstain likewise from certain animals admitted in the popular regimen.

As those, who were not attached to the sacerdotal class, could eat fish, they had also permission to feed on the onocrotalus, or the pelican, which is ichthyophagous. But the priests, to whom all kinds of fish were unlawful, refrained likewise from eating the pelican *; and reserved for their ordinary aliments, nothing more than herbs and fruits, the bread called *koleste*, the flesh of calves, antelopes, pigeons, common fowls, and particularly geese, of which they made an astonishing destruction. This induced them to extend artificial hatching to the eggs of that bird, as we shall observe more at length in another Section.

In the *History of the Heavens*, where the temerity of attempting divination is carried to unexampled excess, we are told that the priests never fed on the flesh of any animal †; but this is an egregious error; and in general the Abbé Pluche was so ill informed, concerning the sacerdotal regimen, and the religion of the Egyptians, that he would have acted more wisely by not introducing such matters. All animals, either quadrupeds or birds, destined for the

* Orus Apollo, Hieroglyph. lib. i.

† Vol. i.—Porphyry, in the fourth book of his *Treatise on Abstinence*, indicates all the animals prohibited by the priests of Egypt. These were the solipedes, the ungulated, and those without horns. In the last class we may place the sheep of that country, which, as Plutarch says, were not eaten.

table of kings and priests, were examined by persons, who do not appear to have been different from the *spragistes*; and they placed some mark to attest that the flesh was not infected with any disorder. It would be superfluous to explain this custom, which is continued and observed with more or less attention in all the towns of Europe. That inspection is intrusted, but too frequently, to people who have not the least idea of veterinary matters; yet, fortunately, the disasters attending this negligence are fewer than would necessarily result in countries where the plague is endemical.

It is truly strange, that such ignorance should prevail with regard to the real cause of the aversion of the Egyptians to beans, after all the scientific parade of so many celebrated authors. But we have only to reflect on an adventure ascribed to Pythagoras, the servile imitator of the oriental philosophers, to be convinced that the strong exhalation, emitted by the *faba vulgaris*, when in flower, made it appear pernicious to the Egyptians. On this account, it was not cultivated in any canton of their country. Yet rejected by man, it might still have served to feed animals. To assert that they could not endure the sight of this plant is ridiculous, when, in fact, they dreaded the smell only, which is extreme in the blooming season. Whole fields in Egypt are now sown with beans, without occasioning any alarm for the effects they may produce, which are said to be intoxicating, according to the common opinion even in Europe among the peasants, who never heard of
diversity

diversity of climates. Theophrastus, who has rendered the history of Egyptian plants so confused, mentions, that no flowers there afford any smell except the myrtle *. But this frivolous assertion was never supported by the smallest shadow of truth. The *neps* of the Arabs, or the violets of Cairo, and the pale roses of *Feium*, are the most delightful in the world. Besides, all the rose-water employed in the eastern seraglios, and in great part of Italy, comes from Egypt. Thus, Mr. Maillet speaks with astonishment of the exhalation arising along the Nile, from the plains sown with beans, *the flowers of which*, says he, *are a thousand times more odoriferous than in Europe* †. Yet Pythagoras would never have been persuaded to traverse such fields, after he was circumcised. Ancient authors, from not having acquired any exact knowledge of Egypt and Hindoostan, have varied astonishingly in speaking of the diet of the Pythagoreans; and from what Aulus Gellius and Athenæus say, we may be convinced, how totally ignorant they were of the whole matter. That no doubt may be entertained concerning the species of this plant, we have only to observe, that it is determined by a passage in Varro. The Flamens of Rome, he assures us, could not eat beans, because their flowers contained infernal letters. This allusion to the two black specks on the wings enveloping the keel is very conclusive. The characteristics of the common bean could not be more distinctly

* Hist. Plant. lib. vi.—De Caul. Plantarum, lib. vi.

† Description of Egypt, part ii.

defined

defined by a botanist. It still results therefore, that the flower was the chief cause of the aversion of the priests, who were not however unacquainted with the qualities of the fruit. Of all farinaceous aliments, this is the most unfit for melancholic constitutions; and no nation was ever more disposed to such affections than the Egyptians. Although amused from time to time with feasts, they soon returned to their gloomy character, which rendered them positive and choleric; *ad singulos motus excandescentes*, says Ammianus Marcellinus, who seems to have perfectly understood their complexion*.

We come now to the particular regimen of the provinces and towns, in which little direct connexion can be observed with health. The Egyptians were not so much clogged as some have supposed, with such observances; the greater part concerned only the fish of the Nile, and two kinds of phytivorous quadrupeds. These were sheep in a part of the Thebais, and goats in the Delta. In a country very flat and even marshy, like that of the Mendesian Nome, the hair of goats might be proper for commerce, but the flesh could never be wholesome. It was therefore not eaten in any part of that district; while, in the rocky and mountainous soil of the Thebais, the inhabitants fed freely on this animal. In some parts of Europe, laws have been made to prevent the inhabitants from keeping goats, because

* *Homines Aegyptii plerique subsusculi sunt et atrati, magisque meliores, gracilenti & aridi, ad singulos motus excandescentes.* Lib. xxii.

they

they are so destructive to forests and plantations. Yet we do not find, that any such regulation ever produced much inconvenience. Sir Thomas More, the chancellor, pretends that England was never nearer ruin than when the proprietors of lands vied in rearing sheep, until depopulation took place in the country; and London began to be threatened with famine. Legislators should be attentive to all such objects, which are surely neither below their dignity, nor unworthy of their notice.

Were the monuments of the Egyptians not enveloped in such clouds of darkness, we might be able to perceive what was their police in these matters. It cannot be supposed that they were guided entirely by superstition; for we know to a certainty that the flesh of calves was eaten in all the towns, even where the temples contained sacred cows and bulls: such were Momemphis, Busris, Aphroditopolis, Chuse, Heliopolis, Memphis, Hermunthis, and many other places not mentioned in history.

The prefectures, where foreign animals brought from Ethiopia were sanctified, had few or no inconveniences to suffer with regard to diet. The prohibition of eating lions could not have been felt in any great degree among the inhabitants of Leontopolis and Heliopolis, who had not more than twenty or thirty of those animals in all their district. Different temples of Egypt contained such beasts of prey. They were brought from Libya or Ethiopia; but the learned could never divine for what purpose.

It is supposed, that the Nomes most incommoded, must have been those where the fishes of the Nile were held sacred. The Egyptian manner of living, however, caused every obstacle to disappear. No person could fish with the line in the Oxyrinchian Nome, and all the pikes taken in nets were thrown back into the river*. It is difficult to trace the source of Strabo's error, when he asserts that all the Egyptians revered this fish, which, in the allegorical style, was accused of having devoured the genitals of Osiris; and it seemed from its voracity to be a remarkable production of the evil principle. The following may be considered as a general rule in such matters: no living creature, to which the priests testified their aversion, was ever worshipped in any part of Egypt.

The inhabitants of the Latopolitan Nome abstained from a fish called *latos* by the Greeks, and *variole* by the French established at Cairo, of which a bad figure is given by Paul Lucas in his last voyage†. This is the largest of all river perch. It weighs sometimes more than one

* Belo is the first naturalist who pretended that the *oxyrinchus* of the ancients was the pike, or the *gucchoe*, of the modern Egyptians. *Observationes*, lib. ii. In this he was followed by many other authors. But a fish is found in Ægypt now called *kefher*, which belongs to the class of perches. The bone of its jaw is very conical, and this might have some connexion with the word *oxyrinchus*, or pointed snout. It is however much less voracious than the pike.

† Travels in Syria and in higher and lower Egypt, vol. ii.

hundred pounds *; and from being held in some estimation in lower Egypt, we may suppose that it acquires a pernicious quality after ascending the Nile to Latópolis, in the twenty-fifth degree of north latitude. Changes of that nature are known to take place with some fishes of the larger kind in Europe.

In the Phageropolitan Nome, forming part of lower Egypt, and at Syene the most distant town of higher Egypt, no person was allowed to eat the phager. It has been improperly confounded with the red mullet of Pythagoras, although really appertaining to the species, in which Artedi comprehends the *sparus rubescens* †. No resemblance whatever can be traced between it and the mullet, except in the redness of the fins. This characteristic is not sufficient to be employed in natural history; but in the symbolical language of the priests, it might serve to define some species, concerning which their observations have remained concealed under the mysterious veil of its physiology. Red color, in the fins of fishes, the roots of plants, and the fur of animals, appears clearly to have been considered by the Egyptians as ominous. The same idea extended even to persons with red hair, for whom they had an extreme aversion; and it is indeed surprising to observe the same antipathy among the Chinese ‡. Without the testimony of

* *Perca Nilotica*. Haffelquist, vol. ii.

† Artedi, *Ichthyologia*, genus 36.

‡ Trigault, *Exped.* apud Sinas, lib. i.; Du Halde, *Description of China*, vol. ii.

Diodorus Siculus, we might easily have conceived, that scarcely any indigenous Egyptian was born with red hair. The objects of this horror were strangers, like the inhabitants of Greece, who have changed greatly since that period, and the people of Thrace, who were then pirates. Some of the bad geographical maps of China, in the same manner give England and part of Germany the name *Hong-tehai*, or the country of red-haired men; yet the inhabitants are fair, and not pirates.

The fish, well known to naturalists by the name of *filurus*, was kept in ponds at Bubastus, a celebrated town of lower Egypt. We must not however believe that this was the only place where it could never be used as food; for the prohibition extended to the whole kingdom. Of three different kinds of *filurus* found in the Nile, not one has scales: and they were probably kept in those reservoirs, of which Ælian speaks, merely for the purpose of feeding the consecrated cats*. The Egyptians employed many things to nourish their sacred animals, which must otherwise have been useless. The heads of victims could not be touched by any person, and they were destined for the crocodiles in the towns where those lizards received adoration. The entrails of animals served for the vultures of Isis, while the heart and liver became the share of the sparrow-hawks. The environs of Memphis were not, like those of Grand Cairo at

* Hist. Animal. lib. xii.—Herodotus and Diodorus Siculus both agree that the Egyptians fed their sacred cats with fish.

the present day, covered with more carcases of asses and camels than all the birds of prey can consume.

At Lepidotum, a town situated on the right bank of the Nile, in the district of Thebais, another fish was prohibited as food. Although, from a passage in Athenæus, this must have been a carp, yet concerning the particular kind, history is very doubtful*. Those, who have taken it for the dorado, consecrated among the Greeks to Cytherean Venus, the same with the Nepthys of Egypt, or the wife of Typhon, do not consider that the latter fish was too remarkable to be mistaken by the Greeks in changing the terms *crysopterys*, used among them, to *lepidotos*. The latter expression was already employed in the Orphics†; and afterwards by Herodotus, who believed erroneously that this red carp was rejected from the popular regimen throughout the whole of Egypt.

In the island of Elephantis, the fish, no longer known, called *mæotis*, could not be eaten; but the flesh of crocodiles was lawful, although it tastes strongly of musk. This lizard was used as food likewise at Tentyris, Heracleopolis, and the town of Apollo, where on certain days every person was

* *Cyprinus rufescens Niloticus*, Linnæi.

† In the *Lithics*, commonly attributed to Orpheus, a stone is mentioned, the silver color of which resembled the scales of the fish *lepidotos*. In some kinds of carp the scales are large and shining, but none of the moderns have hitherto ascertained the species of stone alluded to by Pliny. We may suppose however that it belonged to the arsenical pyrites.

obliged to taste of it, except the priests, who considered this animal as fish. Thus far the institutions of the Jews are conformable to the sacerdotal rule. Judea always had crocodiles, and has them still in a lake called *Muyet-el-Temsah*, and in a small river between Carmel and the point of Acre.

Diodorus Siculus says, that the regimen of the towns and provinces comprehended likewise different kinds of leguminous and bulbous plants, which, he assures us, were allowed in some places, and prohibited in others. This however is a point very difficult to be explained.

On the eastern bank of the Pelusian mouth, in a canton never formed into a prefecture, but dependant, apparently, on the Sethroite Nome, stood a temple where the sea-leek was worshipped, and probably the kind with red roots *. Any law to prohibit this vegetable from being used as aliment would have been needless, for it cannot be employed even in medicine, without some precaution. The inhabitants of Pelusium are said to have abstained from all bulbous plants, and particularly the common onion, although it was used by the other Egyptians in their ordinary food. It seems therefore that a particular

* *Ornithogalum marinum, seu scilla radice rubra.* Tournefort. Mr. Schmidt, in his Dissertation *de Cepis et Allis apud Ægyptios cultis*, says that the word *Κεραμυον*, used by Lucian in speaking of the people of Pelusium, really means the squill. He seems to have been ignorant that garlic does not grow in Egypt, but was brought thither from other countries, whatever Dioscorides may say to the contrary.

part of the sacerdotal regimen had been adopted there; and this accounts for the manifest errors found in Juvenal, Prudentius, and many ecclesiastical writers.

Every person must conceive the difficulty of explaining the reason of such a strange usage as that of worshipping the squill, or sea-onion; and we may affirm with certainty, that it has not hitherto been attempted by any of the learned.

Pelufium, as the name indicates, was situated in a very marshy soil; and the wind blowing from the east drove thither the vapors of the famous lake Sirbon, impregnated with bitumen and sulphur. Many of the inhabitants of that town appear to have been subject to a particular disease, of the tympanite kind, which deranged their reason; and they ridiculously believed themselves possessed by evil spirits. Numbers of people, affected in the same manner, were found near the lake Asphaltis, where the vapors were not less suffocating and pernicious than those of Sirbon.

The small Egyptian statues, to be seen now in some cabinets, were made at Pelufium: they did not represent gods, as some have believed, but dæmons, with their whole bodies, and particularly their bellies, exceedingly swelled. For curing this disorder, nothing was more efficacious than the squill or sea-onion, properly prepared. Thrasyllus, cited by Stobæus, says that the Egyptians employed likewise a small black stone, found on the banks

of the Nile*. This could only have been the most ferruginous species of the ætite, or eagle-stone, of which many pieces are seen above Taran to the west of the Delta. The impalpable powder of the ætite diminished likewise the obstructions in the breast, which deranged the minds of those pretended demoniacs.

Beggars of both sexes, supposed in Italy to be priests and priestesses of Egypt, employed the name of Isis to threaten those who did not give them alms, with blindness, or with the dreadful tympany of Pelusium; and this was called in Latin, *incutere deos inflantes corpora*. Those miserable wretches seen in our days in Europe, who are called Bohemians in France, and Zigeuners in Germany, endeavour likewise to pass for Egyptians, and menace, as is well known, every person who refuses to give them money for telling fortunes. How far the fanatics of Europe have been intimidated by these impostors, who are not Manichæans, as Mr. Peyssonnel pretends, is difficult to determine†. Anciently the lower class of people
at

* Sermo xciii, de Morbis.—Thrasyllus indeed says that this stone was merely placed under the nose of the demoniacs to calm their fury. The Jews used the root of a plant, which was probably the squill, in the same manner. It is almost certain, however, that those drugs could not produce any good effect unless they were taken internally.

† Historical and Geographical Observations on different Nations who inhabited the Banks of the Danube and the Euxine Sea.—

at Rome dreaded their imprecations greatly; and some of the most superstitious, to prevent any bad effects, had recourse to garlic or squills.

Thus the cause of the worship paid to this plant is no longer so very obscure, particularly when we consider that it was confined to Pelusium and Casium, two places peculiarly affected by those local circumstances we have mentioned. The latter town was still nearer the lake Sirbon than the former, and situated consequently in one of the most unhealthy spots of the whole country.

The prefectures of Egypt, we should observe, were smaller in the time of the Pharaohs than under the Ptolemies and the Cæsars. Many ceremonies, apparently belonging to an entire province, had only been established in a particular town, before the Nomes were subdivided, and their number augmented from sixteen to more than three-and-fifty. It was therefore never the intention of the sovereigns of that country to sow discord among the prefectures, in order to crush them under the weight of despotism. But this really was practised by the Greeks and Romans, who from an execrable policy encouraged continual dissensions, that the provinces might weaken each other; as Plutarch gives us, obscurely

It was in Bavaria that those people called *Gypsies* caused the greatest terror among the superstitious. No person would venture to touch them, and they were allowed to steal with impunity, as Aventine tells us in his annals of the year 1439. *Adeo tamen vana superstitio hominum mentes invasit, ut eos nefas violari putent, atque grassari, furari imponere passim, impune sinant.*

enough, to perceive. Under the Romans, the Omibites fought against the Tentyrites, on account of the sparrow-hawks. During their domination the Cynopolitans became the enemies of the Oxyrynchites, from disputes about dogs and pikes. While they governed, another great revolt was occasioned, by attempts to transfer the bull *Apis* from the temple of Memphis to that of Alexandria, by which the former place must have been entirely ruined. Perhaps the insurrection of the Heraclio-polites, who worshipped the ichneumon, should not be placed at an earlier period: it was then that the labyrinth, the most magnificent edifice of the kingdom, and famous for the sepulchres of the crocodile, scarcely escaped destruction. This was in fact the motive of those who excited the furious multitude.

Never, we may be assured, did the like disorders take place, while the ancient police of Egypt was preserved. Neighbouring towns in Europe have fought to maintain the pre-eminence of their patron saints; but such shameful excesses could not have originated under a good form of government. Experience has taught us, in every age, that when civil laws lose their force, superstition cannot be restrained; but as long as their vigor is unimpaired, nothing is easier than to manage fanatics, who are only dangerous in anarchy.

Having spoken of the diet of the priests, and of certain usages adopted by the towns and provinces, it now remains to explain the most important

portant points of the popular regimen. On this subject we shall enter into extensive details, the better to display whatever is most decisive and proper to characterise an entire nation.

In ancient days it was customary to distinguish different races of people by names taken from their alimentary system, which was regarded as the most remarkable part of their manners. Thus the Carthaginians, who consumed so many cuckoos, according to the usage subsisting still on the coast of Barbary, were called Pultophagi, by the Greeks. They gave the name of Artophagi to the inhabitants of Egypt*; because they lived chiefly on two kinds of bread called in their language *petofiris* and *koleffe*. The species of grain employed is still doubtful, and many conjectures have been hazarded by the learned on this matter. However incredible it may appear, much obscurity reigns in the history of the plants most generally cultivated by the ancients. As the same appellations no longer denote things at all similar, conjectures become necessary, and frequent errors unavoidable.

Herodotus contents himself with saying, that, by an effect of the laws, or from usage, the Egyptians never eat wheaten or barley bread; but they employ the grain of *Olyra*. As this word has some distant resemblance to the Greek name for rice, Messrs. Shaw and Gouget have been led to think

* Hecatæus seems to have been the first who used the term *Αγροφάγος*, to denote the Egyptians.

that anciently the inhabitants of Egypt lived on the produce of that plant *. But it was as little known to them as the cassava of Brazil at this day to the peasants of Germany. In far later times, and not until the reign of the Caliphs, the first rice was brought from India into lower Egypt, and cultivated in the neighbourhood of Damietta †. All the Caliphs were not idlers: some interested themselves in the arts, in agriculture, and even in botany. By their order, trees and plants were transplanted from Arabia, and the midst of Hindoostan, along the banks of the Nile. But they committed a great error by introducing the culture of rice; for, amongst many other disadvantages, it has been the cause that many of the higher grounds lie waste.

We may suppose that the ancient Egyptians made little use of their indigenous wheat, because of its inferior quality; and they did not procure a good species until the reign of Ptolemy, son of Lagus, who had grain brought from the island Calymna, which is known to have been one of the Sporades. This seed, indicated by Theophrastus under the name of *Alexandrine wheat*, was cultivated by the Greeks

* Shaw's Travels; Origin of Laws, Arts, and Sciences, vol. ii.
—It would be unjust to require an extensive knowledge in botany from such a writer as Count Caylus, whose studies were directed entirely to the progress of the arts. We cannot therefore be surprised, that in removing the varnish or coat of a small Egyptian statue he should have mistaken some small pieces of the stalks of millet for rice-straw.

† Hasselquist, Reise nach Palästina und Ägypten.

during

during the dynasty of the Lagidæ; and from it they were enabled to make different preparations much celebrated in the commerce of the ancients. What is still sown in Egypt has been continued until now, from the grain introduced by the first of the Ptolemies, who loved those, whom other kings too often despise. Some men, worthy of the greatest punishment, advised him to impose heavy taxes on his subjects; but he discovered the greatness of his mind by rejecting their counsels.

The *olyra* of Herodotus might have been, as Galen* believes, a species of spelt or rye. This appears very probable, from the circumstance of the Egyptians having used so much fermented dough in preparing their bread called koleste, that it acquired a sour taste, as we are informed by Athenæus*. It is necessary to observe, at the same time, that the *olyra* of Linnæus and other modern botanists, is very different from the plant so named by the ancients. These discussions, however thorny, are requisite to cast some light on the manners and usages of a singular race of men, who have attracted the attention of the philosophers of every age, because they cultivated the arts and sciences, caused agriculture to flourish, and contrived above all to terminate savage life in Greece. The latter country was happily situated for distributing the seeds of knowledge, and the first sparks of celestial fire, to the rest of Europe.

* Lib. iii. cap. 6.—Pollux Onomasticon, lib. vi.

The total prohibition of wine made the Egyptians have recourse to a factitious liquor much spoken of in history under the name of *zythum*. They attributed the invention to Osiris, or, in other words, they were ignorant of its real origin. This was a kind of beer made with barley, and it could be preserved for a length of time without injury. Instead of hops, which were entirely unknown in that country, a bitter infusion was made with lupines *; and the same experiment might be advantageous at this day. The Egyptians used likewise the roots of different aromatic plants, for the purpose, most probably, of suiting particular tastes; and Strabo observes that with them the manner of brewing varied greatly. The procedure we have mentioned was most general in lower Egypt, where the *zythum*, like our common beer, was converted into vinegar, and conveyed by the Greek merchants of Alexandria into the different harbours of Europe. The Arabs and Copts no longer possess the method practised by the ancient inhabitants of the country in making this liquor; and their *bouzzac*, from being prepared without any bitter infusion, becomes sour in a few days.

It is astonishing to find Dioscorides maintaining that the leprosy, or elephantiasis, was an effect of the

* *Jam Sifer Affirioque venit que semine radix,
SeEaque præbetur, madido sociata lupino:
Ut Pelusiaci proritet pocula zythi.*

Columella, de Cultu Hortorum.

zythum;

zythum * ; and his error appears repeated in different forms at this word in many other dictionaries. We cannot reasonably suppose that the Egyptians would have persisted during some thousands of years to use a poisonous liquor ; and they certainly were better acquainted with its qualities than a Greek, who wrote books on the *materia medica* in Cilicia.

According to observations, far more exact than those of the ancients, it appears that the water of the Nile produces pustules on the skin, when drank pure, particularly during the floods †. The people of that country had therefore one cogent motive to provide themselves with a factitious liquor, divested by coction and leaven of the noxious qualities occasioned by natron and fixed alkali.

This explains naturally the conduct of the Egyptian priests, who, holding the Nile in the greatest veneration, seldom tasted its waters. They were said to have possessed a particular pit for their own use at Memphis ; but this story, to all appearance, is allegorical ; for they most probably drank *zythum* like the rest of the nation.

Mr. Hasselquist, while he staid at Cairo, investigated some parts of the natural history of Egypt. Among other observations, he transmitted to Stockholm a very minute description of the itching pro-

* Lib. ii. cap. 97.—Ætius, and Paulus Ægineta, speak of the *zythum* as unwholesome ; but they do not at all agree that it occasioned the elephantiasis.

† Pococke's Description of the East. That water produces likewise ruptures and dysenteries, as we find in Granger's Relation.

duced by the water of the Nile. This without doubt is the origin of the elephantiasis, which is irritated more or less, by neglecting to observe a proper regimen*.

The priests were not ignorant of this; but the most singular circumstance is, that they kept the fact concerning the water of their river so secret from strangers, that it was never discovered by any Greek or Roman author. In the many documents we have collected, not a word is said on this point. If any of the ancients acquired any such knowledge, it must have been Plutarch. In a treatise, composed expressly for the purpose, he endeavours to investigate the reason why those who navigated the Nile, refrained from drinking any river water, unless taken in during the night. The fable spread among the Copts or modern Egyptians, relative to a drop of dew, which falls from heaven into the Nile, and makes it ferment, appears to be an allegorical tradition of the priests. Although preserved until the present day, and believed by Father Vansleb, and so many other travellers, it is destitute of the smallest foundation†. Without fermenting, the Nile becomes muddy, by a necessary effect of the inundation; and the water then contains such quantities of insects and *fucus*, that it cannot be used unless precipitated with almond-paste or milk.

* *Est elephas morbus, qui propter flumina Nili*

Gignitur Ægypti in medio, neque præterea usquam. Lucretius.

† Nouvelle Relation en forme de Journal d'un Voyage fait en Égypte en 1672 & 1673.

From all these inquiries it results, that the inhabitants of a country like Egypt, must have submitted to a dietetic regimen, in order to preserve themselves from an infinity of menacing evils. Thus, in no part of the world were civil institutions more directly and intimately connected with health. Every person who observed the laws rigidly, must have been in some measure a physician; and on this account all the Egyptians, as Plutarch says, had the reputation of being skilled in the art of treating disorders*.

Some ancient writers have insisted that the elephantiasis attacked neither women nor eunuchs; and that it was cured by castration. But this mode must have been mortal to the old men, and the young would never have submitted to such a remedy. Yet on such suppositions, Bartholin has founded his opinion, that this disorder proceeded from incontinence, without perceiving that he took the effect for the cause†. The extreme lubricity of the lepers is only a consequence of their distemper; and all those who have travelled in Egypt, might have convinced themselves, if they pleased, that the two sexes are alike susceptible of this indisposition. Neither does it spare the eunuchs, although the common symptoms are not visible with them, as must readily be conceived, when it is known that the elephantiasis corrupts and inflames the spermatic juices. The priests of Egypt had therefore wisely enjoined the

* In his treatise to prove that animals have the use of reason.

† De Morbis Biblicis.

people to use certain laxatives once every month. Some modern physicians have pretended to divine the composition of such medicines; but they were unfortunate in their conjectures, when believing it to be an infusion of the roots of horse-radish and beer*. They must surely have been ignorant, that the cassia tree is indigenous in Egypt; and that fenna grows without any kind of culture in the Thebais, as far as the first cataract of the Nile. Thence, at this day, it is forwarded into Europe by means of the farm established at Cairo, which is in the hands of the Jews, like all the other principal branches of commerce in the so well regulated states of the Grand Signior. Little doubt, therefore, now remains of the nature of the menstrual cathartics used formerly in Egypt.

Modern historians have erroneously repeated, that the Egyptians had an aversion, and even a horror, for the shepherds of their country. In fact, they detested those robbers of Arabia only, who are called Bedouins, because they wander with their flocks, and pillage every-where. The Hebrews had the same manners, when they arrived in Egypt; and they preserved them, as we find, until their departure. Thus the cause is obvious, why the Egyptians hated such people; and we have only to read attentively all the laws of Moses, to perceive that they tended to change the Jews into a nation of cultivators, by correcting the vices inherent in pastoral life. The se-

* Le Clerc's History of Medicine, lib. i.

quel will discover more at large, how much that manner of living excites to theft and robbery.

Those people who guarded the swine, were prohibited from ever entering the temples : they could always be distinguished by their long hair ; and, forced to marry among themselves, they formed an isolated and despicable tribe. In some relations concerning Hindoostan, we read of a class of men, existing at this day, who are much more detested than the swine-herds of Egypt. But many circumstances with regard to their not being permitted to appear in public, may be considered as fabulous. No Indian, it is said, can even speak to them without becoming impure ; so that, driven from the rest of mankind, they have contracted in the shade of the forest the manners of wild beasts. Perhaps this might be the case with some small canton under similar circumstances with the *Giezi* of lower Navarre, the *Capots* of Gascony, and the *Cacous* of Brittany. Infected with the leprosy during the crusades, no person could be connected with them on their return to Europe. Although some recent observations have led to believe that the leprosy is never transmitted beyond the fourth generation ; yet it appears to have continued much longer with these people, who, however, are at length free from that disorder *.

* Abbé Venuti's Dissertation on the *Cabets*. The *Giezi* seem to have taken their name from the leprous person mentioned in the fifth chapter of the second book of the Kings of Israel.

As the Egyptians always reared swine for the advantage of agriculture, they had instituted two grand feasts, during which those animals were the only victims; and this prevented them from becoming too numerous. The people had permission at that time to eat the flesh, provided they did not touch it after the full moon, when the sacrifice was performed without the temples, and not by the hands of the ministers.

Herodotus, as well as Eudoxius, cited by *Ælian*, should be pardoned for saying that the Egyptians used swine for ploughing and harrowing the ground. Their error appears less enormous, when we suppose that those voracious animals were introduced into the fields immediately after the inundation of the Nile, to devour the roots of aquatic plants, the spawn of frogs, and all that the ibis could not destroy, in the short time between the retreat of the Nile and the first instant of labor. The plough was then generally used, and we do not find that the Egyptians ever substituted any thing for this instrument.

It is difficult to ascertain whether or not that practice was of such advantage to agriculture, as people imagined in the distant times, of which we are speaking. In the sequel it was abandoned entirely. Then, those men, so much detested, because they guarded animals judged useful, but impure, disappeared so completely, that they were never more mentioned. It may however be supposed, that, taking advantage of the confusion during the general revolt against the Persians, they associated with others nearly in the same

same situation, and formed that celebrated republic of robbers, who fortified themselves in the marshes of the *Delta*, nor far from the Heraclitic mouth of the Nile; as we learn from Heliodorus *. Some passages in the Idyls of Theocritus have given rise to the opinion, that Ptolemy Philadelphus succeeded in dissipating and destroying totally this confederation of banditti †. But the truth is, that it subsisted upwards of four hundred years after the death of that prince. And in the life of the emperor Marcus Aurelius, we read that, in his reign, the Romans weakened that state by sowing dissensions, which no republic could ever resist; and much less when composed of robbers.

Civil laws, religion, and all that can make impression on the human mind, were employed by the Egyptians, to prevent the people from eating the flesh of cows, when arrived at the term of fecundity; and by this an Egyptian was as well known then, as a Jew at this day by his aversion to pork. Some authors have supposed, that this regulation had no other object than to favor agriculture; but many other motives required an exact police for the preservation of cattle. As tributes of calves were frequently to be paid to the court of the Pharaohs, as well as to the sacerdotal class and the military, who, according to immemorial usage in the East, received no pay in money, it became necessary to preserve the flocks; for any scarcity must have occa-

* *Æthiopic. lib. i.*

† *Idyl. xv. and xvii.*

fioned much disorder. We do not perceive in this, as several learned men have pretended, the superstition of the Indians relative to the *gboy*; because they never eat the flesh of any animal; and with regard to aliments, the calf is as useless to them as the cow. Besides, every one knows, that the three principal sacred animals of Egypt, the *mnuevis*, the *apis*, and the *onuphis*, were bulls. But this is not the case in Hindoostan; and the traveller Kempfer has been without doubt mistaken, when he supported the contrary.

It is impossible to determine exactly the number of animals, prohibited by the popular regimen of the Egyptians; because most of the monuments on that subject have been lost, and they cannot be replaced by conjectures. We know with some certainty, of no more than twenty or thirty kinds, among which are included the birds of prey, both by day and night, from the eagle of Thebais, to the owl of Sais; and from the vulture, or capon of Pharaoh, to the falcon of *Delta* *. Then follow the ibis, the crane, the curlew, the stork, and different kinds of

* The custom of consecrating all the birds of prey to the gods, came originally from the Egyptians. They were distributed in the following manner: *Accipitres distributi sunt autem & consecrati variis Diis. Perdicarius & Oxypteros Apollinis ministri sunt, ut ferunt. Ostrifraga & Harpe sacre sunt Minerva. Plumbario Mercurium delectari aiunt. Junoni dedicatur Tanypteros; Diane Buteo; Matri Deum Mermnus; alii denique aliis Diis.* *Ælian*, lib. xii. The eagle was sacred to the god Ammon of Thebais, who is the Jupiter of the Greeks. The ravens were dedicated to Orus.

plover,

plover, called in general *purifiers of Egypt*. Among the small quadrupeds, no person was permitted to eat the weasel, the cat, or the ichneumon, which is neither hermaphrodite, nor ever entered the bowels of any crocodile. Such fables disgrace the judgment of those who relate them, as much as the understanding of the credulous men, by whom they are believed.

With regard to dogs, it is false, that after the invasion of the Persians, they lost the esteem of the Egyptians, as Plutarch has asserted. They did not devour, as some have believed, the bull *Apis*, which was wounded by Cambyfes ; for the priests embalmed that animal many years after, when it expired in its temple. Besides, the veneration of the Persians for dogs, was still greater than that of the Egyptians ; as we find not only from the customs of the Persis, established now in India, but likewise by the orders given to the ambassadors of Darius Nothus. They enjoined the Carthaginians to leave off eating those animals, like so many other cynophagi of Africa ; and the *sophetim* promised in the name of the senate, that the people should comply with the requisition *. We may conclude, that this singular affair, which became the object of negotiation, must have particularly interested the magi.

The priests refrained from all animals fed with fish without exception ; and some were prohibited even among the people, such as the otter of the Nile,

* Justin. Hist. lib. xix.

which is twice represented on the Palestrina Mosaic. It is known to have been sacred in all the provinces, as well as the *tadorne*, a species of duck which many have confounded with the goose; and what is still worse, the antiquary Spon supposes it to be the ostrich. The extreme affection of the *tadorne* for its young, so much spoken of by the Egyptians, seems to have been altogether allegorical; and such stories were invented by the priests, concerning the good and bad qualities of animals, that they might express with more facility in hieroglyphics, the vices and virtues of mankind. Although the duck species, in general, is destructive to the spawn and fry of fish; yet the *tadorne* makes still more havoc than any other in the lakes and rivers. It received, on this account, the name of the flying beaver, or otter; and no other reason was requisite to have it rejected from the regimen of the priests. Other particular motives had transferred the same observance to the people; but this did not extend to the pelican, which, in that country, is a bird of passage only.

The Egyptians without doubt, as well as the Hebrews, had a law to prevent their eating the flesh of quadrumanous animals, although none were produced in their country. The two kinds of monkey worshipped at Babylon, near Memphis, at Hermopolis, and in an anonymous town of Thebais, were brought from the interior of Ethiopia; and this proves, that a greater correspondence was kept up between the two countries, than has been generally believed. It

is not known whether the Cebus, or the Cynocephalus, gave rise to the error of Porphyry, who pretends, that the Egyptians had a particular temple, where they adored a living man. As this was undoubtedly false, it follows that one or other of these monkeys had been taken for a human being, by voyagers who were either deceived, or wished to impose on the Greeks; for their curiosity is insatiable, says Heliodorus, with regard to whatever concerns the Egyptians. Bears were probably considered in the quadrumanous class; but it does not appear, that they ever came from Ethiopia, where Gefner says they are very numerous*. We may suppose therefore, that those only which descended at times from Libya into lower Egypt, received funeral honors, most probably at Papremis†. We know of two European towns, where bears and storks are preserved; at the Hague, this has its utility; but in Berne, it is only singular. When any advantage can be derived from wild beasts, it is better to allow them privileges, as the English have practised, particularly in some of their colonies, with regard to vultures. Linnæus mentions the famous law of the Egyptians, which pronounced death on whoever killed any of these birds; and although similar

* Historia Animal.

† Papremis was one of the towns of Typhon, to whom bears seem to have been consecrated. The exact position of that place is not known; but it could not have been very distant from the Nitriatic Nome, or the desert of St. Macaire, the only canton in Egypt, where bears are seen at this day.

severity has been used in the French colonies, against those who butcher cows, yet it does not appear altogether excusable. The Egyptians probably suffered much from the devastations of mice; and the vultures are of the utmost utility in destroying such vermin. The quantity of dead carcasses lying everywhere around Cairo at this day, has rendered them lazy; and the inhabitants of some parts of Egypt, as Prosper Alpin says, sow arsenic with their grain, which is far from being practised with safety. The vain idea of preserving what is called game, has occasioned the almost total extermination of birds of prey in the greater part of Europe; and they no longer protect the fields against mice, sparrows, snails, and rabbits, those plagues of agriculture. Birds of prey perish with hunger sooner than feed on any kind of plant; and the ancients acted wisely in consecrating them to their gods, as we have seen by the passage of *Ælian* already cited.

The priests do not appear to have rejected from the popular regimen, any other fish than those destitute of scales; like the *silurus*, lamprey, and the pernicious eel of the Nile. This distinction occasioned many epigrams among the Greeks, who were ignorant that feeding on fish of that description, increased all disorders connected with the elephantiasis and melancholy; because it thickens the blood, and diminishes perspiration. This general law, of which we are speaking, joined to the particular institutions of the provinces and towns, constrained the lower class of people to live almost entirely on vegetables,

bles *. Those pretended Egyptians, who, as Herodotus says, lived on fish dried by the sun, must have been the Mostarabs, scattered along the western coast of the Red Sea. They were a mixture of Arabs and Ethiopians; and although geographers have separated them from the Troglodytes, yet they might well be confounded together, because they were all wandering people, who did not acknowledge themselves subject to the Pharaohs. The shore they inhabited is so barren, that they could not have found any other nourishment than fish, the value of which appeared so very trifling in Egypt, that it was abandoned to slaves, or salted for exportation. As Father Sicard has imagined two lakes called Mœris, instead of one, we find more difficulty in forming any judgment relative to the immense quantity of fish it was said to contain; but if the same lake is meant, as appears to be the case, which was situated near the town of crocodiles, we may be assured, that its fishery does not render a silver talent of duty to the Tefterdar, or treasurer of Cairo; although that was said to have been the product under the ancient kings, according to the testimony of some Greeks unworthy of any credit. They exaggerated, in the first place, the size of the lake, and afterwards the quantity of fish was augmented by a necessary consequence.

* The Egyptians were obliged by law to eat fish on one day only in the whole year. This was the ninth of the month *Tboth*. Athenæus may be consulted concerning their manner of serving up repasts.

In no country of the globe has the vegetable reign undergone so many revolutions as in Egypt, where new plants continually imported, have caused the ancient to be forgotten; and to this is joined the negligence of the Turks, which it is sufficient only to name on such occasions.

The Romans had made one very wise law, preserved among the monuments of their jurisprudence, which denounced most serious punishments on whoever destroyed any of the beautiful trees called *persea*. They were very useful in Egypt, and flourished there more than in any other country*; but few indeed are seen at the present day. This example is sufficient to give an idea of numberless others, which we shall pass over in silence.

Many details would be necessary to convey a distinct knowledge of all the alimentary plants cultivated by the ancient Egyptians so successfully, that we are astonished at their industry and love of agriculture. Some observations, however, are almost indispensable, concerning the different kinds of nymphaea or *lotus*; as their history is now perfectly ascertained, after having been for a long period very confused, even in the eyes of botanists.

The nymphaea, the root of which produces the colocasia, has seeds about the size of beans, each in a separate cell, *loculis monospermis*; and was never indigenous in lower Egypt. When no longer sown there, it disappeared so totally, that not a single plant

* This appears in the law *de periculis per Ægyptum non excidendis vel vendendis*.

is to be found in all the district between Cairo, Alexandria, and Tineh, where the banks of the Nile and of the canals were so generally covered, that it was called the drefs of Egypt.

Besides this species, the Egyptians cultivated another called by the Latins *lotometra*; and its grain, very small, served to make a kind of bread, known by the name of *cace*. This has been so much vaunted by Pliny, that some people might be tempted to make a trial of it in Europe; and, according to every appearance, the grain would be found more advantageous than the root, as we shall have occasion to observe again in speaking of China.

The *lotometra*, after having been greatly improved by cultivation, has now disappeared also. Thus the Turks and Arabs have no other than the wild species found in the Nile; and the root, called *corfium* by the ancients, is eaten commonly at Cairo.

Among all the monuments of Egypt, what affords the most characteristics of the *nymphaea colocasia*, is an offering made by the priests to a statue of Osiris, preserved in the palace Barbarini at Rome. On it can be distinguished the leaves, flower, calyx, capsule, and all the parts of fructification so distinctly, that no person can possibly be deceived who has any knowledge of botany*.

Some curiosity might be expressed here, relative to the annual experiment made in Egypt with the seeds of alimentary plants, as we learn from Pal-

* This plant differs in nothing from the *nymphaea nelumbo* of Linnæus.

ladius, the only agronomical author who has handed down the fact *. In June, samples of all the different grains were exposed to the open air, until the rising of the dog-star, when, accordingly as they were found more or less dry, a judgment was formed of those which would produce a good crop on that season.

We may with great apparent reason suspect that Palladius, or the Greek cited by him, has given us as an experiment, what was in fact a religious or political ceremony. By this the government diminished at pleasure the culture of certain plants, such as the *raphanum*, and the poppy, which were more lucrative than wheat or the *olyra*, particularly in the Thebais, where the best opium in the world is produced at the present day. Some have pretended that the concrete juices of that nature brought from Cappadocia, Paphlagonia, and India, do not produce such agreeable dreams as the real Theban opium. Doctor Mead, who has written a very interesting treatise on this subject, does not appear to admit any

* *Græci afferunt Ægyptios hoc more proventum futuri cujusque seminis experiri. Arcam brevem loco subactis & humido nunc excolunt; in eâ divisis spatiis omnia frumenti vel leguminum semina spargunt. Deinde in ortu caniculæ, qui apud Romanos quarto decimo calendarum Augustarum die tenetur, explorant quæ semina ortum sidus exurat, quæ illæsa custodiat. His abstinent: illa procurant, quia indicium noxæ aut beneficii per annum futurum generi unicuique, sidus aridum præsentis exitio vel salute præmisit.* De Re Rustica.—It appears that the greater part of these seeds had already budded at the rising of Sirius; and towards the evening of that day, observations were made on those which were dried up or decayed.

distinction

distinction between the effects of these narcotics ; yet perhaps they may be compared to different kinds of wine, which do not produce the same species of intoxication.

It does not appear that the *burd* or *papyrus* ever served to nourish the people of Egypt, as Count Caylus has believed on the faith of the ancients, and particularly of Theophrastus, who acknowledges the impracticability of eating the roots, but says they were sucked on account of their sweetness *. This circumstance gives great reason to suppose that one reed has been taken for another ; and that he really spoke of the sugar-cane, which grows spontaneously in that country. Anciently this plant was chewed green, or dried in ovens ; because the manner of pressing it with the cylinder, and preparing it with fire, was then unknown to the Egyptians. Their ignorance in this respect was perfectly similar to that of the Chinese, who during many centuries could not produce sugar, although the canes grew wild in their marshes, until they were taught, as they acknowledge, by a stranger ; and we may well believe them when they make this confession.

The Indians have the merit of this discovery, and it was introduced into Egypt by the Kalifs, although the common people still preserve the custom of using

* Hist. Plantarum, lib. vi. cap. 9.—The word *berd* employed by Count Caylus to denote the reed which furnished paper, is a corrupt expression copied from Prosper Alpin : it should constantly be written *burd*.

the canes while green*. The quantity of sugar made there is inconsiderable; and the best part is reserved for the seraglio at Constantinople, whither the Pacha of Cairo is obliged to send it as a tribute. With regard to the reed *sari* of the Nile, and the *acheroes* found in the neighbourhood of the lake Mœris, they have no resemblance whatever with the sugar-cane, supposed by some people to be distinguishable among the plants on the Isiac table†.

We have now to speak of the artificial incubation of eggs practised anciently by the Egyptians, and still in use among the Chinese. History does not mention any other nations where a similar procedure was adopted; either because the principles were not sufficiently known, or the climate was unfavorable, as is really the case in the north of Europe. This difficulty could not have been obviated by sending Egyptians, as Mr. Maillet proposed, into France, to give lessons and correct the imperfect method of Mr. Reaumur. An invincible attachment to their country appears to have prevented some peasants of the environs of Cairo from making this voyage: but

* Arvieux, Voyages in the Levant, vol. i.

† As the Isiac table has been made in Italy, the representation of vegetables it contains is not probably very exact. Whether the chicory, which thrives so well in Egypt, was prescribed to the people by law, as Moses thought proper to order it in certain cases, or that they had naturally a liking to that plant, we find them using it constantly. Among the different kinds most esteemed we distinguish the *hippocheris*, the *condrilla*, and the *intubum erraticum*.—The *arum colcas*, the *melochia*, and the *melongena*, are new plants brought into Egypt by the Kalifs.

it is probable that they never could have succeeded in diminishing the mortality among the chickens, nor in preventing the corruption of a great number of eggs exposed to the heat of ovens, lamps, or horf-dung. These men, transported under another sky, and finding their usual practice disconcerted, would have had recourse to a thermometer; and when they fell into the embarrassments they wished to avoid, they would excuse themselves by saying that they had not their scheic. In Egypt the Sheic Arabs begin by stripping themselves naked; and stretching themselves on the ovens while the heat is first communicated, they recite for payment a prayer in that attitude; because the people believe that without their aid the chickens could never be brought to maturity.

It seems surprising that the priests of Egypt, whose knowledge on a great number of subjects was very extensive, should have wanted sagacity in one essential point: they had never discovered the method of hatching with ovens; neither do they appear to have suspected the possibility of such a practice, as it is easy to demonstrate. Aristotle, the most ancient author who has spoken of this matter, says, that in Egypt the heat of dung alone was employed*; and Antigonus, who lived some centuries afterwards, confirms the assertion†. Pliny, who wrote at a still later period than either, attests the same thing‡: and finally

* Hist. Animalium, lib. vi. cap. 2.

† Hist. Mirab. Collectanea, cap. 104.

‡ Hist. Nat. lib. x. cap. 54.—Pliny has translated verbatim the expressions of Aristotle.

the emperor Adrian, who had travelled through the whole of Egypt, examining every singularity with attention, expresses himself in these terms, in a letter to Servian: "I have nothing else to wish the Egyptians, than that they may continue to nourish themselves with their chickens, which are hatched in a manner that I am ashamed to mention" *pudet dicere* *.

All these testifications united, prove that the method of ovens was not known in that country until the year one hundred and thirty-three of our era, and perhaps long after; for when and how it was introduced has not been discovered. If the Egyptians had employed such means, they would not have failed to inform the emperor Adrian, who affected so much dislike to the chickens produced by dung. It is not intended however to insinuate here that the expressions employed by that prince contain the smallest shadow of good sense. He had then raised a temple on the banks of the Nile to the profane Antinous, and this he should have been ashamed to mention; for it was still more degrading than to worship animals.

The priests, perhaps too much attached to ancient observations taken from the eggs of the ostrich and the crocodile which are hatched in the sand, did not attempt further experiments. Yet their method was far from being the best, otherwise it would not at this day be entirely abandoned in Egypt.

* Vopiscus in Saturn.

As the Pharaohs, the great crown officers, and the persons belonging to the sacerdotal class, in consequence of their dietic regimen, nourished themselves chiefly with geese, it became necessary to devise means of multiplying those birds in proportion with the number consumed in this manner, as well as in sacrifice. When the worship of Osiris and Isis was introduced at Rome, the Romans were not a little shocked that the first victims required were the guardians of the capitol *.

On this account; as Diodorus observes, the Egyptians were induced to practise the artificial incubation of the eggs of geese, with which, in all probability, attempts might prove more successful in Europe than those made with hen-eggs; for the latter are subject to many disorders, and the chickens require to be warmed at every instant.

Whole villages in Egypt had the name of *Chenoboscion*, and lived entirely on their flocks of geese, according to a particular mode supposed to be retained by the Jews. This is not the only custom they adopted in a country so much cursed and regretted by them, that no just opinion of it can be formed from their accounts. The priests had, no doubt, reasons unknown to us for giving the preference to those birds in their regimen: but whenever appearances of any epidemical disorder were discovered, they, as well as the sovereign, renounced that food, and

* *Nec defensa juvant Capitolia, quo minus anser
Det jecur in lances, Inachi lauta, tuas.*

subsisted entirely on pigeons; as we find by a passage in Orus Apollo*.

It is very remarkable that pigeons should be thought less liable to infection during a contagion than all other living creatures; while we know that they are the only domestic bird afflicted with a disorder very like the small-pox, which renders their flesh at that time very disagreeable and perhaps pernicious.

No ancient author appears to have made the smallest mention of any such disorder; and this leads us to conclude, after many researches, that its origin is modern. Varro and Columella, who enter into such minute details on the manner of rearing pigeons†, would not have failed to notice this indisposition, had they known, like us, how fatal it proves to those birds, when they feed on buck-wheat, which came originally from the same country with the small-pox. During the crusades the seed of

* *Purum autem columba animal esse videtur. Si quidem cum aëris constitutio pestilens est, omniaque tam animata quam inanimata, eâ afficiuntur, quotque hoc vescuntur animali, soli ab hac lue immunes servantur. Ideoque eo tempore Ægyptiorum regi in cibo sumendo nihil aliud præter columbas apponitur, idemque iis, qui, quod Diis ministrant, puri castique permanent.* Hieroglyph. lib. i. cap. 56. This ancient custom of feeding on pigeons is still adhered to in Egypt. More pigeon-houses are seen there than in any other country; and they are considered by the Turks as the surest signs of wealth. For more information on this point we refer the reader to De la Bruyne's Travels, chap. 34.—Turtle-doves are likewise found in Egypt, but anciently the priests were prohibited from eating them.

† Varro de Re Rustica, lib. iii.;—Columella, lib. viii.

the

the *fagopyrus* was first brought from Asia to be cultivated in Europe. We may be sure that the ancient Egyptians, constrained by the nature of climate and the force of laws to guard their health, and examine the quality of their aliments more scrupulously than any other nation, would never have determined to nourish themselves with pigeons, if they had perceived the least variolic symptom. This observation demonstrates what has already been said of the novelty of a disorder no more suspected by Aristotle, Pliny, Ælian, and Phyle, than by Varro and Columella. If the ancient Syrians persisted in refraining from these birds, and allowing them to fly in large flocks in all their towns, it was entirely from superstition *; because the pigeon was the symbol of their country, and the first sovereigns of Assyria constantly carried the figure on their standards, as Bochart has proved in his *Hierozyicon*.

Nothing is found in all the real monuments of the Egyptians tending to confirm what so many ancient authors, besides Antigonus and Virgil, have attributed to them with regard to bees; and the whole may be considered as a fable invented by the priests to deceive strangers. They might indeed have hastened the production of young bees, by placing them in the stalls of their sacred bulls, when the heat was sufficient for that purpose. This method, so long a secret, is now well known, but seldom necessary to be practised.

* Tibullus, *Eleg.* viii. lib. I.

In the charming poem of the *Georgics*, the secret of Virgil consists in supporting each train of didactic verses with an episode; and the most remarkable of all is certainly that relative to the creation of bees. It was not however to imitate a passage of the fourth book of the *Odyssey*, as some have believed, that he has introduced Proteus; for, according to the Greek traditions, Proteus had been king of Egypt, and thus he is supposed to be perfectly acquainted with the customs of his country, where the artificial hatching of these insects might have been practised from the highest antiquity. But if the fables alluded to, have not originated from this circumstance, they must be ascribed to the manner in which the Egyptians make swarms of bees appear suddenly, in places where none were seen some time before. They embark the hives on rafts, and the bees collect their provisions along the Nile, from Thebais to the Delta: during the day, they are seen every-where in the fields, and at night they return to sleep on the river.

SECT. III.

ON THE ORDINARY FOOD OF THE CHINESE.

MENDOZA was the first traveller who spoke of the artificial incubation practised in China: his accounts were published about the year one thousand five hundred and eighty-five; and Father Martini, contenting himself with copying them, has not collected any new observations*. The relations of these missionaries are so inexact, that we need not be surprised if Willoughby, who had no other source of information, has conveyed such unsatisfactory notions on this point in his History of Birds. Mr. Eckerberg, in some details sent from China to the academy of Stockholm, in the year one thousand seven hundred and fifty-four, has at length favored us with some certain information†. In the first place, the Chinese never employ dung; neither have they any thing similar to the ovens seen in so many places in Egypt. Their method consists in constructing square chests about a foot high, placed on plates of iron, under which they burn green wood, that the fire may be violent; while the eggs are carefully ranged on a bed of sand, and covered over with mats. Those

* Atlas Sinicus. Kircher, China Illustrata.

† This memoir has been translated into German with the title of *Bericht von der Chinesischen Landwirthschaft*; and we have followed the translation.

who have an opportunity of consulting Mendoza, will see how careless he has been in his description, apparently composed from imagination.

The eggs of ducks alone are employed by the Chinese for such purposes: and sometimes the sand is so strongly heated, that the ducklings appear two days before their term. Purchasers find an infallible experiment in holding them up by the beak: if in this position they neither move their feet, nor flutter their wings, it is a proof that they are premature, and can never live to attain their full size. From this we perceive that too great a degree of heat weakens chiefly the nerves and muscles, which have an amazing force in the wings of birds of flight, and in the feet of such as remain chiefly on water. Perhaps indeed viviparous animals may likewise suffer in the same manner, by being kept very warm during the period of gestation.

As flocks of ducks, so prodigiously numerous in China, are generally reared by people destitute of every other dwelling than their barks, the heat of the small cabins where such families live, and collect their eggs, indicated most probably the procedure of the southern provinces; for that manner of incubation is not practised at Peking. It seems therefore to have been altogether an effect of chance, that the Egyptians and Chinese resemble each other in this, for in all other points respecting their manner of living they differ essentially.

The Chinese never had any dietetic regimen prescribed by law, and consecrated by religion.

With

With them, the flesh of no animal was ever prohibited, and they are ignorant of all distinction relative to fish with or without scales. They seem to have neither repugnance nor horror for any kind of food: they eat rats, bats, owls, storks, cats, badgers, dogs*, and cows, which were considered as an abomination among the Egyptians. Rice, indeed, is the principal food of the common people, in the greater part of the provinces. The other aliments most used are fruits, herbs, fish, ducks, and, above all, swine. The latter are different from those of Europe, and the rest of Asia, if we except the kingdom of Siam, where the Chinese breed has multiplied greatly, and whence it has been transported into some islands of the Indian Archipelago, and even to America. Although these animals are less inclined than ours to wallow constantly in the mire, their great number would certainly infect the Chinese towns, where they run about in herds, if the cultivators in the neighbourhood did not take care to clean the streets. As they are fed chiefly with fish in the maritime provinces, their flesh becomes frequently oily, and is supposed to increase the disorders of the eyes among the Chinese. Thus a regimen could not have been without good effects, particularly as both men and women were subject to a species of contagious leprosy, considered by the laws as one of the causes sufficient to dissolve

* Brand, in his *Reise nach China*, says that dogs are chiefly employed as food by the Chinese during the great heat in summer, because they fancy their flesh to have a cooling quality.

legitimate matrimony *. This proves that their physicians have never been capable of curing that indisposition; otherwise they would not have considered a transient evil as sufficient to destroy what was intended to be a perpetual union.

Nothing is certainly more opposite to all the institutions of the Egyptians than the precept attributed sometimes to *Fo-hi* and at others to *Tchuen-hio*; but although probably belonging to neither the one nor the other, it is notwithstanding very ancient. It concerns the animals which are to be sacrificed during the annual feasts; and which constitute six kinds vulgarly termed *pao-chi*. These are the bull, the horse, the sheep, the dog, the cock, and finally the hog. Their blood streams in honor of all the gods, and of that man called Confucius, of whom the Jesuits have made such a great philosopher; and to prove it, they assert that he prophesied the coming of the Messiah, although a worse proof could not be alleged in such matters.

As the Chinese never rendered any worship to animals, it follows naturally that they could not have any idea of the regimen observed in the prefectories of Egypt. The religion of these two nations being so very different, no resemblance can therefore be found in those customs immediately derived from religious institutions; and not to admit this would discover more of blindness than obstinacy.

No objection can be made here, founded on the supposition that the Egyptians sent a colony into China, previous to their having adopted the worship

* Salmon's Present State of China, vol. i.

of animals. Mr. de Guignes, who has insisted so much on that pretended event, assures us that it took place about one thousand one hundred and twenty-two years before our era, when the worship of animals was in all its force. The epoch of Mr. Mairan, who had chosen Sesostris for the conductor of these emigrants, is not more admissible; for Manethon, the historian best informed in all such matters, says that the oxen of Memphis, of Heliopolis, and the buck-goats of Mendes, were consecrated long before the birth of that monarch*. Yet the introduction of these three animals must have been later than the others, because all the religious practices having been transmitted from higher to lower Egypt, the ram of Thebes, and the ox of Hermunthis, were of course more ancient than the *Mnevis* and *Apis*.

If any should pretend that the Egyptians, so far from introducing their religion among the Chinese, had abandoned it altogether, we have to answer, that they are not properly informed relative to the genius of oriental nations, whose religion contains many ceremonies, which are always preserved more obstinately than dogmas. In proof of this, we shall offer a few examples, taken from the history of foreign nations established in China.

The *Kin-Kiao*, or Jews who emigrated thither before our era, have persevered in detesting the flesh of swine. They continue to be circumcised, as well as to celebrate the passover; and if they do not clip money, it is because they are prevented by the nature

* Syncel. Chronograph.

of the coin of China. The same tenacity is observable in the Mahometans, who established themselves in that empire about the ninth century, and have never abandoned one essential point of their persuasion any more than the Parsis or Guebres. The latter, we are told by some authors, took refuge there in the year five hundred; but this appears to have happened at the period when Persia was subdued by the Mahometans. Then we may suppose these unfortunate people went to seek a new country, carrying with them the books of *the great and small Chariot*, which were afterwards translated into the Chinese language. The Tartars, who formed their principal establishments in China under the dynasty of the Moguls, follow still the religion of the grand Lama; and with regard to the Indians who introduced the worship of *Fo* among the Chinese, every person knows that their doctrine, so far from being degenerated, has subjugated the mind of almost the whole nation.

Thus the Egyptians, who are ridiculously said to have polished China, would be the only people incapable of disseminating or preserving their religious institutions. But we see more and more the great difference between puerile systems hazarded on deceitful appearances, and a long train of researches where things can no longer produce illusion.

The vine is found in many provinces of China; but all attempts to make it produce a good wine have hitherto been ineffectual, although the Jesuits neglected nothing conducive to that effect, in their
gardens

gardens at Pekin. What is called *Mandarine wine* * is so disagreeable, that the emperors of the present dynasty gave permission to import Spanish wine, on which the merchants gained at first cent. per cent., and afterwards were losers. In one thousand seven hundred and fifty-four, it happened that sherry could be bought cheaper at Canton than in the town of Cadiz; because more had been brought there than sufficed for the market. The example of the sovereign, descended from a foreign family, did influence the inclinations of the people, who preferred what is called *skiet sava*, and vulgarly *sampsu*. This has no resemblance to the *zythum*; for it is not brewed, but distilled badly from rice; and what some travellers drank at Canton had the taste of the worst species of European whisky. The Chinese drink it warm, like all their other liquors; and in this they are different from all the rest of mankind.

The quality of the water, generally speaking, throughout the whole extent of the empire, is not the best; because in some places it has a brackish taste, and in others appears to be impregnated with the selenitic principle, proceeding perhaps from that vein of slate intermixed with fossil coal, extending, as is said, from one extremity of China to the other. The yellow mud of *Hoang-cho* is ferruginous, as well as

* We do not exactly know whether this wine be really pressed from the grape or some other fruit. It must not however be confounded with the *tarassum*, which is a spirituous liquor used by the Tartars at Pekin.—The Chinese use different oils, extracted from olives, rape-seed, sesame, palma Christi, *tong-yeou*, and *tcha-yeou*. The three last are not employed as aliments.

the red color of the river *Tan*. The *Me-kiang* contains vitriolic particles: the waters of *Hiao* have a bituminous smell; and those of *Cung-yang* are saponaceous, from their alkali. Besides, as Father Le Comte observes in his *Memoirs on China*, the greater part of the rivers, particularly in time of rain, are nothing more than immense torrents of mud; because in their descent from a very high country, they sweep away a quantity of soil. With regard to the rivers of the province of *Pe-tcheli*, Martini pretends that they contain so much nitre, that ice forms on them sooner, and dissolves later, than should be supposed, considering the latitude of the country. Linnæus assures us, that the weather, there, is more rigorous than in Sweden, where he has raised plants incapable of supporting the climate of Peking, although more southern by near twenty degrees. It has indeed been said that the north wind, blowing directly from the snows of Siberia and Tartary, augments necessarily the degree of cold in the capital of China. But on examining attentively it will be found, that the uncultivated state of the interior of the province of *Pe-tcheli* contributes greatly to this phenomenon. Some just ideas may be formed by reading the description of a vast wilderness, where the emperor *Can-hi* hunted in one thousand seven hundred and twenty-one, with the Russian ambassador. This district is eight or nine miles from Peking; and nothing can be represented more completely savage: *We were already six hours on horseback*, says Mr. Bell of Antermoney, *and although we had ridden fifteen English miles,*

we

we could not see the end of the forest. We then turned towards the south, and arrived in a marshy country, covered with very high reeds, where we started a number of wild boars.*

Instead of making us remark such cantons as this, which must influence greatly the temperature of the air, the Jesuits have preferred maintaining that the quantity of nitre augmented continually, when advancing from Peking towards Tartary. But as we do not find that any chemical analysis was made of that pretended salt, their assertions concerning it deserve little attention. We are likewise well informed with regard to Canton, that all the water drunk there is taken from the river; and as the tide flows many miles higher, we may easily conceive that, in six hours, the muddy water cannot become perfectly clarified. To whatever cause the nature of the waters in China may be attributed, it is certainly proved by experience, that they are rendered more salutary by boiling, and the addition of some astringent leaves, such as those of the plum-tree, or tea-tree †. This discovery, made, as some historians pretend, about eleven hundred years ago, occasioned a considerable diminution of the use of *sampsu*, or rice beer. The latter however had been taken warm long before the discovery of tea, even admitting that it was first known under the dynasty of *Tang*, which is not credible. Without repeating what has been written by so many physi-

* Journey from Petersburg to Peking.

† Osbeck, Reise nach Ostindien und China.

cians down to the present day on the dreadful disorders, said to be occasioned by the use of warm drinks, we shall only cite Mr. Tronchin, who speaks in the name of the whole. "To the maladies of the ancients," says he, "others are now added of which they had no knowledge: they proceed chiefly from the nerves, and form more than half the disorders of the richer class of people. The sedentary life of the women has made warm drink an amusement: it costs little, and is procured without much trouble; but they suffer more from it than the men. When relaxed in this manner, they are seldom fruitful: and if they do breed, it is to little purpose; for miscarriages are more frequent, and the infants, who escape such disasters, remain always feeble. Thus the weakness of the human race is perpetuated, nervous disorders become hereditary, and propagation is diminished."

From this mode of reasoning, it would result that the nervous system of the Chinese must be so much deranged, that the males want force to engender, and the females to conceive. Yet the women of that country, who drink nothing but tea, and pass the whole of their lives in retirement, are very fruitful; and they think themselves indebted to the use of warm drink for that flexibility of all the parts of the body, which renders child-bearing so easy. But, whatever some travellers have affirmed, they are far from dispensing with all assistance in labour, like the ancient inhabitants of Peru, where, previous to the ar-
rival

rival of the Spaniards, says Garcilasso, no midwife was ever seen.

It must not be believed, that the effect of the same cause can vary through the influence of climate; for we know well that population has not diminished in Holland and England since the year one thousand six hundred and sixty; although two hundred million pound-weight of tea has been used there during that period. Thus we cannot easily persuade ourselves that warm drinks tend altogether to diminish fecundity; however their action on the viscera and blood may appear real. But if any people in the world were affected in this manner, the Chinese surely must have exceeded all others; and yet the evil with them is nothing comparable to the exaggerations of Mr. Tronchin. In a poem on the virtues of tea, composed by *Kien-Long*, the reigning emperor, we find that the Chinese are far from suspecting that it affects the constitution, in parts so essential as the nerves; or that it contributes to their extraordinary pusillanimity. So great is this cowardice, that while the Mandhuis Tartars are fighting for them in the north, they are in danger of allowing themselves to be subjugated in the south by the Peguans. Some examples of heroism, found in their history, must have been the effects of *opium*, the importation of which is now prohibited throughout the whole empire; for many causes, purely moral, prevent them from becoming disciplined or acquiring military knowledge. It must be confessed besides, that for so poor a people no cheaper drink could be provided than tea, to

amelio-

ameliorate the muddy water at Canton, where the commerce of that leaf has occasioned a considerable increase of population, since the year one thousand five hundred. It is very wrong to form a judgment of the whole empire from that town; for the merchants have deserted several places, and particularly *Emoui*, to establish themselves in Canton *, where the European ships bring annually very considerable sums. Hitherto the observation has been invariable, that people who have once adopted the use of warm drinks, never renounce them, unless when force is employed, as we find to have been the case in some small German states; because the exportation of specie created great alarms. But even violence would prove ineffectual in Turkey, where such beverage met at first with many uncommon obstacles both from government and religion. Neither could any thing now induce the Arabs and Egyptians to abandon it, any more than numerous nations of Asia and Africa, whose manners in every respect have been immutable. The chief charm of such liquors consists less in their nature, than the little expence they require, and the kind of laziness they encourage.

What seems to be justly remarked is, that tea renders the Chinese women pale; thus the mode of colouring the cheeks, and painting with the earth *nien-chou*, has been carried by them to such excess, that

* Lockyer says that *Emoui* was rendered desert by the robberies of the mandarines, whose crimes were not greater there than in Canton. Those two towns should have been demolished, according to the project of the Tartars.

it discovers the defects intended to be concealed. The drugs they employ must be still more pernicious than carmine, or the lacker of carthamus, which crack the epidermis; because they are rendered vivid by very strong acids. In Salmon's Collection, it is said, that towards the age of thirty, or thirty-five years, the complexion of the Chinese women is entirely destroyed by the violence of paints.

Considering the sobriety of the people of China in general, and that their chief drink is warm water, we could scarcely suspect them of being immersed in the grossest debaucheries. Mr. Torren is astonished that the Jesuits, in their relations, have been totally silent on this depravity*; but Father Parrenin did mention the fact, and endeavoured to persuade Mr. Mairan, that the excesses of that nation were inferior to those committed in other parts of Asia. In this he conformed himself to the general maxims of the missionaries of his order, who have constantly endeavoured to lead Europe into error, by giving a too favorable description of the Chinese. The Jesuits would have spoken very differently, if the emperor *Can-bi*, instead of favoring them at his court, had expelled them from Peking; for when driven from Ethiopia, they had nothing more at heart, than to represent the sovereign of that empire as a wretched negro, without either shirt or shoes†. Such lying accounts, dictated by hatred or passion, have thrown

* Reise nach Surate und China.

† This print is prefixed to the *History of Ethiopia*, by the Jesuit Tellez.

more difficulties than can be believed in my way during these investigations. All travellers attest that the Parsis of India live irreproachably, in comparison with the Chinese, although in a climate fully as ardent as that of Canton. This difference can be accounted for no otherwise, than by supposing that the principles of morality are purer there than in China, where manners are more regulated than morals: and the force of institutions, exhausted on trifles, is insufficient to effect any thing of consequence. When vain opinions, ceremonies, and rites, are confounded with the more essential duties of man, his remorse, and the conscience which produces it, become feeble.

The continual use of *jaem-saem* has been supposed to influence the bodily temperament of the Chinese. But, in fact, that root is far from possessing all the virtues attributed to it, even as an aphrodisiac; although placed by Mr. Kœnig in the first rank, according to a singular procedure generally adopted, as he pretends, in the seraglio of Constantinople †. It was owing entirely to quackery that the *jaem-saem* sold in Europe for some time at an excessive price. But fortunately we are now perfectly undeceived respecting that plant; and instead of getting it any longer from China, an American species is smuggled thither. The Mandhuis Tartars have prevented as much as possible the importation, declaring, that the *jaem-saem* of the New World is good for nothing. As they have the exclusive privilege of col-

* Regnum Vegetab. in voce *Gin Sem.*

lecting that article, they appear to be much better acquainted with their interests, than the Chinese with the nature of medicine. The most whimsical prejudices are too deeply impressed on their minds ever to be effaced; and they have been foolish enough to persist, during many centuries, in seeking some liquor capable of insuring immortality. Perhaps they still hope to succeed, although some of their emperors have perished by such experiments; and probably the greater part of those who imitated them shared the same fate. We may hereafter have occasion to speak more at large on compositions of this kind; but, here it is sufficient to observe, that, according to all appearances, the *jaem-saem* was the chief ingredient. Men who fancied themselves physicians, have even gone so far in Europe, as to surpass all the childish exaggerations of the Chinese respecting this plant; and Deckers wrote a treatise in praise of its virtues with as much enthusiasm, as Bontekae recommended the use of tea. All its qualities, however, extend no further than to fortify the stomachs of those who feed on fish or rice. The latter is so palatable to the Chinese, that necessity alone forces them to cultivate wheat and millet in the northern provinces, where, on a soil too elevated to be laid under water, they have introduced a species of dry rice little different in fact from barley.

It is not precisely known, whence the Chinese have received the seeds of several plants apparently exotic. Tobacco is cultivated among them in fields of amaz-

ing extent; and some travellers have insisted that this was the case previous to the discovery of America by the Spaniards; but even admitting the fact, no inference can be drawn, that any communication between the New World and Asia existed long before the birth of Christopher Columbus. In my *Philosophical Dissertations on the Americans*, the custom of swallowing the smoke of certain harsh herbs, is proved to have been common to the savage nations of both continents. Through the commerce of the Italians, Arabs, Armenians, and even by means of the first Portuguese, many vegetable productions were transplanted among the Chinese, who exceed all other nations of the earth in their passion for keeping plants and shrubs in pots. All their apartments are ornamented in this manner; and the people who dwell during their whole lives on water, have them constantly in their boats. In Europe, where certain flowers only are cultivated, little scope is afforded for important discoveries; but the Chinese, attached as if from instinct to every species of herb and shrub, have acquired a knowledge of certain properties which could not otherwise be suspected. Thus the sagittary has been abundantly planted in the wettest parts of their fields; and its root is an excellent nutritive*. Some have supposed that this vegetable might be advantageous in the marshes of our own continent: but however easily such experiments may be made, they do not promise to be very suc-

* *Sagittaria, major radice tuberosa, Sinenfis: Succo ji-fa di-fa.*
 celsful.

cessful. No utility can be derived from the nymphaea, which abounds in all stagnate waters, unless perhaps by employing the seed. Even admitting that the root could be increased in size, as is the case in Bohemia and Italy, the marshy nature of the soil must be supposed to render it unwholesome; although this does not happen in warm countries. The species of nymphaea found in Europe is neglected by the Chinese, who confine their care to what produces the bean and the colocasia, and they find the same inconveniences attending it which were anciently experienced in Egypt. It is at times filacious, and of a nature termed *araneosus* by Pliny, but defined by Martial in a manner far more poetic *. This plant, called in China *leon-gao*, or *lien-hoa* in another dialect, prospers alike in the lakes, the ditches, and the marshes where the water is seven or eight feet deep. We have therefore to regret that it cannot be transplanted into our cold countries. The ancient inhabitants of Europe, and particularly the Greeks and Romans, made continual attempts to raise the grain brought from Egypt. Although Pliny pretends that they proved successful in Italy, we have reason to doubt his information; for Athenæus, who wrote long afterwards, assures us that this plant never appeared in Europe, except at one place in Epirus, where it resisted the climate during two years.

* *Niliacum ridebis olus, lanasque sequaces,*

Improba cum morfu fila manuque trahes.

Martial speaks of the worst kind of colocasia.

As the principal observations relative to agriculture and rural economy among the Chinese, have been collected in the southern provinces, some authors suppose that they followed two maxims, which are sufficiently remarkable to merit examination. It is believed, in the first place, that they employ few beasts to perform any labor practicable by man; that they do not use any machines to facilitate great operations; that they pound their rice rather than erect mills; and finally, that they prefer slaves to horses for drawing their boats. Another maxim ascribed to them is, never to keep many large cattle, but to multiply as much as possible animals of the secondary, or of the smallest kind, and particularly poultry.

In some of the southern provinces, things are indeed on that footing; but many large cattle are found on advancing towards the north of the empire; and mules, asses, and horses, abound as much at Peking, as they are rare at Canton. Thus, what has been taken for a very general rule, proceeds from nothing more than the wants and resources of the different climates.

If the people did not continually crowd to the neighbourhood of the towns, the most tedious and heavy work might be facilitated by machines. But to establish them now, would be dangerous, or rather impracticable. There, as in other despotic governments, it appears that security diminishes as the distance from the towns augments; and owing to this, too many inhabitants are attracted thither. On seeing the population of Constantinople, Aleppo, and
Cairo,

Cairo, no person could believe that the dominions of the Grand-Signior are in a state of wretchedness not to be described. Yet, in much less unhappy times, the introduction of the printing-press occasioned such a revolt at Constantinople, that it became necessary to renounce the project. The Turkish and Arabian copiers are nearly in the same situation with the people in China who pound rice, pack up tea, and draw boats; they gain so little, that they can hardly sup, when they have paid for their dinner. With regard to the advantage or danger of substituting mechanism for animal labor, the question seems now to be perfectly decided.

In a free and well-governed country all machines deserve encouragement: where tyranny reigns, they are pernicious; because some resource must be preserved in great cities against extreme poverty, which is constantly reproduced by despotism. In that state of things, when the person who is called the prince, and those who are termed governors, can do all, and the law nothing, it is natural for the subjects to approach as much as possible the residence of their sovereign, where they hope at once to profit from his protection and his luxury. This is the reason why the population of the capital towns of the Asiatic states has astonished all travellers, who were short-sighted, and destitute of penetration.

It is proper here to remind the reader of what has been said in the preceding Section, on the causes contributing, in a more particular manner, to render the Chinese empire so irregularly inhabited. Deserts

are found in the midst of it, extensive enough to contain whole nations of savages. Thus also in Turkey and the Barbary states, many tribes of Bedouin Arabs are found as unpolished, and, unless for their flocks, as poor, as the *Mea-offi*, and the Iroquois of Canada. China is besides infested by robbers, who associate in bands like those called *Tschingeni* in the East, where, from many of their characteristics, and particularly from their instruments of music, they were supposed to be the remains of the Egyptian nation.

These, or similar disorders, not to be avoided in despotic states, concur to diminish security in proportion to the distance from the seat of government. Those who are averse to becoming either savages or thieves, establish themselves, as much as possible, in those cantons immediately under the eyes of the great officers called *Tsong-tow*. They are nearly similar to the bashaws of Turkey, whose vexations, whatever they may have been, never rendered half so many villages desert in Syria and Egypt, as the dread of the Arabs, who, calling themselves the descendants of Mahomet, inspire those they have robbed with holy respect.

By reflecting on all these circumstances, it is easy to comprehend why we have considered the scarcity of towns in China as very extraordinary; and that they are few in number, cannot be doubted; although no person has ever been able to divine the cause. An Abridgment of Universal History, very well written, was published in one thousand seven hundred and seventy-one by a celebrated German professor, who does not make the towns of the whole Chinese empire

pire exceed one thousand four hundred and sixty-nine. He never reflected that his own country contained a greater number. The Chinese villages do not compensate for the deficiency; and they become considerable only as they are in the vicinity of the capitals of the different provinces.

Relative to the Chinese of the south, who rear only small cattle and poultry, their climate, without doubt, favors this practice, as appears from the circumstance that the artificial incubation of eggs does not succeed so well in the north. Yet this system can only be followed in places proper for rice, where water alone serves to promote vegetation; or near great towns, where a sufficient quantity of manure is found in the streets. Small animals are incapable of rendering the soil rich enough to produce wheat; and the nourishment of man becomes consequently more scanty. But the fisheries are so amazingly productive in the south of the empire, that they compensate for this disadvantage.

Cold and heat, two causes apparently very opposite, augment the fecundity of fish. In the proximity of the boreal circle, and towards the tropics, they are far more numerous than in the temperate parts of Europe. The Nile is supposed to contain four times as many fish as the Rhine; although in the former, great destruction must be made by the crocodiles as well as by the pelicans. When we consider the position of the real ichthyophagi of our ancient continent, they are found to have always existed, as at the present day, in the arctic regions, where the cold is insupport-

able; and on the burning shores of Asia and Africa. Yet, as the Chinese have few days of lent, except those indicated by the mandarines in the provinces, an equal quantity of fish is exposed for sale in their market during the whole year; and some travellers have therefore entertained an extravagant idea of the total consumption. Thus we find the Mandhuis Tartars were perfectly convinced that China must have suffered less from famine, if the people had renounced fishing and dwelling in barks on the water, to cultivate the interior country.

Having now spoken concerning the population of Egypt and China, and the manner of living there, we propose to discuss, in the second part of this work, those objects which have a more immediate connexion with the arts.

SECOND PART.

SECT. IV.

STATE OF PAINTING AND SCULPTURE AMONG THE
EGYPTIANS, CHINESE, AND ORIENTALS IN
GENERAL.

WHEN two nations are supposed to have a common origin, it is necessary to examine in what degree they cultivated the fine arts. But this inquiry, confined, in appearance, to a simple comparison of some known monuments, extends to so many objects, that, to develop the subject, it is absolutely necessary to be informed of the causes which prevented the inhabitants of the East from ever making any considerable progress in painting and sculpture.

It is proper to observe, in the first place, that the analogy between the manner of speaking and of painting in the East, is much greater than has been believed; as will appear from the following remarks.

No sooner were painters seen in the Greek towns of Europe and Asia, than the great difference, apparent in their works, gave rise to the Helladic and Asiatic manner*. When orators appeared there, the dissimilarity of their compositions made eloquence likewise be divided into the Asiatic and Attic†. Thus

* Pliny, lib. xxxv. cap. 10.

† Quintil. Institut. Orator. lib. xii.

the same cause must have rendered a distinction necessary in the arts of speaking and of painting.

We must now begin by examining the origin of what is called the Oriental style; which is no less remarkable in pictures, than in verse and prose. The moderns imagine it to be an effect of servitude, which, perverting the imagination of man, and degrading his mind, inspires slaves with overstrained expressions, and dictates bombastic phrases to masters. This opinion is so distant from truth, that it does not deserve to be refuted; for the inconsistencies alluded to, were but too obvious in the productions of the orators of the free towns of Asia. Santra in his time proposed a more ingenious but equally chimerical system; and no other sentiment can be adopted than that of Quintilian, who saw perfectly well that the source of the Oriental style existed in the organs and instinct of the speakers and of the hearers: *dicentium et audientium naturæ*. To this chief cause might be added many others, proceeding from customs, religion, and the form of arbitrary government; and we shall be led to explain in what manner the monster Despotism affects trades as well as arts.

The philosophers of this century are said to extend the influence of climate too far with regard to productions of genius: but the ancients went still further; for they supposed an amazing difference between the air of Bœotia and of Attica, although these two small countries were adjacent. The greater part of the statues found at Thebes were indeed executed, as Pausanias informs us, by foreign artists; but he does

not

not mention a law existing there, by which painters, as well as sculptors, who did not excel, were liable to a fine * ; and the discouragement it occasioned among artists, must have operated still more than climate. Such an institution was entirely opposite to the nature of things; for sound policy required that good workmen should be rewarded, instead of punishing bunglers, who already suffered sufficiently from their bad productions; and this example proves clearly that physical and moral causes should not be totally separated. If Chinese children were educated at Rome, and instructed in the principles of drawing, they might be capable of producing paintings less ridiculous than those of the pagoda of *Emoui*; but still some traces would remain of the Asiatic taste. Thus, in reading Seneca, Lucan, Martial, and Florus, it is very easy to perceive in an instant that they were originally Spaniards, who, more than all other nations in the world, have constantly approached the Oriental style, which has likewise its shades and varieties. When the kaliphs caused the sciences to flourish, the Arabs wrote in a style much less strained than at present; but even then it was far from being natural.

The number of things to be spoken of here, will not permit us to treat of each Asiatic nation in particular; for it is necessary sometimes to neglect details, and confine ourselves to essentials only, that a chapter may contain what might otherwise require a whole book. The loss of the greater part of the history of the arts in

* *Ælian, Hist. Divers. lib. iv.*

Egypt, is a circumstance truly lamentable. All the wrecks now remaining form only a mutilated body; but they excite our admiration, and prove, better than all reasonings, the antiquity of our globe.

Pliny has fallen into an unpardonable contradiction, when he maintains that the art of writing had been known from all eternity, and denies at the same time that the Egyptians practised painting during six thousand years. Plato finds no difficulty in believing it to have been known to them for ten thousand years*. We must indeed allow that he was a bad chronologist; and the Greeks have accused him, with reason, of betraying his ignorance of dates, even in the history of his own country. Every reasonable person will allow, that it is not necessary here to dispute on a day or a month, as if the epochs of the first institution of the Olympiads, and the taking of Troy, were to be determined. The introduction of the arts is no momentary event, but a train of various circumstances depending on each other, through a series of centuries. The first colony that descended from Ethiopia into the Thebais, possessed a kind of hieroglyphical writing. Thus, before Egypt was even inhabited, the art of drawing had made some progress

* De Legibus, dialog. ii.—Plato has taken great pains to inform us that the ten thousand years he mentions here are not to be considered as a vague expression for any great length of time; but that he means them to indicate a period with precision. Some have believed that this passage is contradicted by another in his *Timæus*. If the matter were of sufficient consequence, we could prove that Plato is uniformly of the same opinion.

among the Ethiopians; but the annals of their gymnosophists, or priests, are long since totally destroyed, and never did any loss deserve more to be regretted.

We see therefore the ridicule of attempting, in such darkness, and at so great a distance, to fix the precise period when painting was introduced among the Egyptians. They pretend that their king *Tbotfortbrès* amused himself with this art, or at least with delineating hieroglyphics, at a time when Greece, and the rest of Europe, were covered with forests, in the shade of which some savages lived on acorns.

When Plato, in his *Dialogues*, makes an anonymous interlocutor assert, that ten thousand years had elapsed since some pictures then seen in Egypt were painted, we should observe, that colors, applied in all their natural purity on the partitions of the Theban grottoes, might really be capable of supporting so long a period. The fewer mixtures are admitted in colors termed native, and appertaining neither to the vegetable nor animal reign, the less they are subject to change, where the rays of the sun do not penetrate. This was the case in the excavations we have cited, where many tints could be distinguished of a beautiful red, and a particular blue, very different from that of Alexandria. It should likewise be observed, that almost no earthquakes took place in Thebais, and as rain seldom falls there, the most ancient apartments cut in the rock are at this day perfectly dry without any appearance of nitre.

If we find the hieroglyphical grotto much injured, this proceeds from the efforts of the Arabs to pierce the vaults, more than from the attacks of time. What seems very certain is, that the colors have remained, until our day, in some royal sepulchres of *Biban-el-Meluk*, which, in my opinion, have been constructed before the pyramids, and previous even as those of *Hanara* and *Illabou*, which are considered as the most ancient of all, from their state of decay and the place where they are situated.

Mr. Winkelman and the Abbé de Guasco have formed different systems, on the causes supposed to have prevented the Egyptians from becoming great painters or sculptors. But these two writers seem to have imagined obstacles, rather than endeavoured to explore the authentic monuments of Egypt, where the ignorance of anatomy was never so great as has been asserted. It was even known that some of its sovereigns have caused human bodies to be dissected, to trace the origin of certain disorders, for which, at this day, we have no real remedy. Manethon, besides, was too well informed to have shocked all traditions and received opinions, when he relates in his history, that an ancient king of Egypt had written a book on anatomy, or more probably the art of embalming. This operation, exercised on human bodies of both sexes and all ages, as well as on thirty different kinds of animals, must have afforded more knowledge, in such matters, to the Egyptians than is now possessed by any of the Asiatics who live in very warm climates, where the sudden

corruption of carcases inspires horror for researches of this nature, which have never been carried very far, even in Spain.

Allowing that the ignorance of the Egyptians in anatomy was as great as it has been represented, this could not be assigned as the cause why their sculptors frequently expressed neither the muscles, the nerves, the veins, nor the bones; for all these parts are sufficiently obvious to the eyes of those who never saw the dissection of bodies. The truth is, that great stiffness was the characteristic of all the productions of that country, where, among so many different worships, none was rendered to the Graces. It must be admitted, however, that the living models of the artists were formed nearly in the manner they have been described in the second Section of these researches. As nature had not been very liberal to the women of those charms which are the object of all their wishes, it is easy to conceive that the men were still less favored. Their gait appears, from the different monuments, to have been heavy and confined, like that of the modern Copts. How these people could be imagined so far prepossessed in their own favor, as to dispute the prize at the Olympic games, seems unaccountable; for the athletes, who came from the banks of the Nile to Olympia, were Greeks of Alexandria and Arsinoe; and the directors of the games condemned them all to be fined, for having united cunning and deceit to dexterity. The same opinion must be formed of those children, mentioned by Statius and Martial, who were sought after by the Romans for their vivacity

vacuity and sprightly fallies. They were not born of Egyptian parents, but of some unfortunate Greek families established at Naucratus, or in the vicinity of the lake Mareotis, who trafficked in this manner with their progeny. This was far from ever being the case with the inhabitants of Egypt; and all the promises of the French consul at Cairo were insufficient to persuade some poor Copts to let their children be sent to Paris, at the desire of Louis the Fourteenth.

Although, says Schweigger, the Egyptians no longer marry their sisters, they are not less an ugly race, and resemble, adds he, those frightful robbers who have over-run Europe under the name of Bohemians or Gypsies*. But, as we have already observed, incestuous marriages were not common in Egypt, until after the conquest of Alexander; and during fourteen hundred years that none have been contracted there, the bodily faculties of either sex have not become more perfect. From this it results, that such unions have had no other influence than perhaps to diminish population; for the Ptolemies had constantly few children by their sisters, and Philadelphus had none by Arsinoe; and this indeed might be owing to some cause purely moral.

The Egyptian sculptors were not to blame because they knew no other beauty than that of their own country; but they are unpardonable for not copying nature. The human species was never so deformed there, as they have represented it, by placing the ears much higher than the nose, as in a Harpocrates now

* Reis Beschreibung. tt. iii.

in England; and the same monstrous characteristics appear on several other statues, particularly on a head in the Villa Altieri, at Rome. What then is to be said of those who assert that the artists of Egypt were so rigorous with regard to all proportions concerning the exact distance of the members, as well as their respective size? Diodorus Siculus appears to have given rise to this error, by attributing to the Egyptians the method of making statues of corresponding pieces, cut previously with great exactness. We may conclude that he either invented this fable, or had it imposed on him by others; for nothing of the kind is seen among the prodigious quantity of Egyptian antiquities collected, now, in different parts of Europe. Mr. Maillet indeed purchased at Cairo a statue composed of three pieces of different-colored marble, which is supposed to have since passed into the cabinet of count Caylus; but this had no connexion with the procedure spoken of by Diodorus*. Neither has a Colossus seen in the Thebais before *Medinat Habu* been constructed according to the meaning of that author; for the stones, of which five can be distinctly counted, are ranged in layers†. From another figure, placed about thirty steps further south, and consisting of one single piece, we may infer that the Egyptians were forced to adopt that method because they could not find two

* Bibliot. libro ii. Leo Alberti did not discover any great efforts of genius in perceiving the method of executing a statue in two places, in Paros and in Carrara.

† Pococke, Description of the East, book ii.

blocks sufficiently large for the purpose; and to transport even one mass of such prodigious dimensions was really a great effort. Mr. Jablonski and the chancellor Mosheim could not agree respecting one of these colossal statues. That which is most mutilated, and covered over with Latin and Greek inscriptions, according to Mr. Jablonski, is the true vocal statue of *Memnon*, or *Amenophis*, so much spoken of in antiquity*; and all the conjectures opposed to this opinion, seem to be vague and unfounded. The section on architecture will prove how many grottos, caves, and galleries, were pierced in that stratum of calcareous stone which supports the vegetable soil at the depth, sometimes, of not more than three or four feet. The vocal statue, from the testimony of Pausanias, must have been placed near the entrance of the cryptes, and a branch of these excavations, most probably, passed under its pedestal. Thus, nothing more was requisite to make *Memnon* resound than to strike the rock with an instrument of metal; and as the noise did not proceed from the head, as Philostratus pretends†, but from the plinth, or throne, on which the figure was placed, it is easy to discover the artifice. When the subterraneous passage could no longer be preserved, the phenomenon ceased likewise. Another explanation has been proposed by a person of learning, who admits no other agency than the rays of the sun, and the par-

* De Memnone Græco & Ægypto hujusque celeberrima in Thebiade Statua.

† Vita Apollon. lib. vi.

ticular disposition of the stones*; but it is not necessary to refute this whimsical opinion, which, to remove one difficulty, admits a thousand others. The communication practised below the base of the Colossus was far from being unexampled; for under the ivory statue of Esculapius at Epidaurus, pits had likewise been dug, apparently more for the purpose of some pious fraud than to preserve the humidity, as strangers were led to believe. The chancellor Mosheim pretends that the priests of Thebes having lost the ancient statue of *Memnon*, made another refund in the days of the emperor Domitian, to oppose the progress of Christianity, by pretended miracles. But this is really carrying the audacity of divination in the history of Egypt too far; for the chief sacerdotal order had been ruined there long before Christianity was known in the world. None, indeed, of the inscriptions on the feet of Memnon seem to be more ancient than the reign of Domitian; but this only proves that strangers who visited that monument, in former times, did not think fit to engrave their names there, as some European travellers have done on the highest of the pyramids.

* Memoire sur les Obeliskes, par le Pere G—— de l'Oratoire. —The Abbé Gedoyne asserts, in his translation of Pausanias, that the statue of Memnon *sent forth a noise like the breaking of the strings of a musical instrument*. The original expression is *χιθαρὰς ἢ λύρας*, which denotes positively the breaking of the strings of a cithern or lyre. The stone chest seen in one of the sepulchral chambers of the great pyramid refunds nearly in the same tone when struck with an instrument of metal.

Pierius, in the forty-ninth book of his *Hieroglyphics*, thinks it very credible that the Egyptians affected to give an air of great simplicity to their statues, that the people might not be led into idolatry. Mr. Winkelman suspects that even a law existed on that account, to prevent them from copying exactly the human form, while they had unbounded liberty in representing animals *; and in this class the sphinx is considered, which he examined with far more attention than Belon. He discovered, it is known, the characteristics of the two sexes; those of the lion and of the virgin; the latter of which is placed further forward towards the breast. This extravagance, so difficult to be explained, proceeded from the mystical doctrine, where the Divinity is called hermaphrodite, capable of creating and extracting every thing from itself. The sphinx was used emblematically in that sense; but the Egyptians never represented the Deity in the manner Eusebius describes the statue of the god *Cneph*; and Mr. Jablonski has proved that author to be grossly mistaken †.

It is needless to dwell on the apprehension of Pierius on the subject of idolatry; but no decisive passage is found in all the ancient authors, concerning that pretended law which prevented the sculptors

* In his German work, entitled *Geschichte der Kunst*, the great sphinx in basalt of the *Villa Borghese*, the two lions of the capitol, and two others of the *Fontana felice*, are described as having very beautiful contours. Casanova cites other Egyptian lions at Dresden, but all their monuments are not ascertained to be executed in the best style.

† Pantheon Ægypt. tom. i.

from finishing exactly the statues of men. All that can be inferred from the expressions of Synesius and some others, is, that the priests did not permit the artists to depart from the attitude adopted for such images as had any connexion with religious worship. They were in general represented with the feet joined together, less from the reason alleged by Heliodorus *, than because it was an ancient usage, the origin of which we will endeavour to explain.

The art of embalming seems to have been partly invented by the Ethiopians, who did not place their most precious mummies in wooden chests, but covered them with a transparent substance, supposed to be glass by Herodotus, Diodorus, Strabo, and Lucian. This was probably a resinous matter, something like yellow amber, which would certainly preserve human bodies, as well as insects, if the secret could be found of rendering it ductile or liquid. The Egyptians, who had nothing of this nature in their country, were forced to make cases of wood for their mummies†; and as their first statues were copied from these, they have exactly the appearance of

* Æthiopic. lib. iii.

† The Egyptians also, to preserve their mummies, had glass cases, like that which contained the body of Alexander the Macedonian. Others were made of black or white marble, of basalt, and touch-stone, *lapis phalaris*. Of the latter we find one in the castle of Uffe in Touraine, a description of which is inserted in the *Collection of the Antiquities of Gaul*, by Mr. Savagere. This author pretends that the Egyptians embalmed no more bodies after the conquest of Cambyles. But we have reason to believe that they continued the custom even to the reign of Theodosius.

fwaddled figures. When the artists proposed to give the statue some more life by removing the bandages, they let the feet remain joined together, as in the colossus of *Memnon*. In this manner, that custom became established; and it was consecrated by the priests solely to the symbols of religion.

They had prescribed likewise a manner of representing *Nietha*, or *Minerva*, who was never to appear standing; but still it would have been easy for an able statuary to form a fine figure sitting. Instead of supposing that such impediments checked the progress of the Egyptians, we should rather conclude that their genius was too feeble to vanquish difficulties. Sterility of ideas must first exist in the artist, before it can appear in his work; and when any country in many centuries produces no person whose talents give him sufficient authority to shake off the yoke of prejudices, it is a proof that the arts are there chained down by invincible causes. Besides, the sequel will discover, that a continual repetition of some given form is the common defect of eastern nations, who subject themselves to known contours, without endeavouring to vary effects. In the Asiatic style likewise, the same tropes and figures are repeated incessantly; and the frequent comparisons used by the authors of that country proceed from an unruly imagination, which flies to several objects when one only is in question; and thus, confusion results from what they take for perspicuity.

The Egyptians have been much blamed by those who believed that among them all trades were hereditary

ditary in the same families. Even the painters and sculptors, it is said, were of the number of those who had to follow the footsteps of their fathers, without being allowed to adopt any other profession. Mr. Goguet passed for having written very judiciously, when he endeavoured to demonstrate that this usage had been fatal to the fine arts; but it is astonishing that no person ever perceived that no such custom ever existed in the smallest degree.

It would have been impossible to find constant employment for the Egyptian families, who would have applied themselves solely to painting, sculpture, and engraving. If, besides, they had the misfortune to beget many children, the greater part must have starved with hunger, from want of work. Such an institution is only practicable where the sovereigns have workshops of their own, as we shall find, in the sequel, to be the case with all the despots of Asia; and whether the tradesmen find work there or not, they must still remain to be fed like slaves.

But some may observe that the testimonies of Isocrates and of Diodorus Siculus, on this point, are very positive: they both assure us that in Egypt the trades passed constantly from fathers to their children. To this we must answer, that these two Greeks have been undoubtedly misinformed, and Diodorus may be suspected of having copied Isocrates, who, in the shade of the school, exercised his imagination much more than his judgment. The whimsical piece he has ventured to term the *Eulogy of Busiris*, betrays the most profound ignorance of the history of Egypt,

where no legislator of that name ever reigned. Ovid and Hygen say, indeed, that while he was on the throne, the country experienced a drought of nine years; and this is another gross fable unworthy of all credit. In short, the authority of Ovid and Hygen, in such things, is no better than that of Isocrates, and his was equivalent to none at all.

Whether Diodorus was right in asserting that all the artificers of Egypt were noble, or Herodotus, who pretends the contrary, it is certain that they formed a body, or separate class, and could not become either priests or soldiers. Thus professions were not hereditary in families; for every person was at liberty in that respect to follow his choice; but artificers had to remain in the class they had chosen, which appears to have included laborers likewise. As an admirable law existed there against begging, under any pretext whatever, every person was forced to work; and even the priests had more occupation than we are led, at first view, to suppose. Thus, according to the manner Mr. Goguet supposes matters were arranged in Egypt, the families of engravers on fine stones might have increased exceedingly*; and from this we see clearly that all his ideas of the matter were false and even ridiculous.

The military and sacerdotal classes possessed certain lands, which descended constantly from father to son; for the priests and soldiers were all constrained to marry. The children of artists could not, there-

* On the Origin of Arts and Sciences.

fore, have been admitted into either of these bodies without creating great confusion, and destroying, in some measure, the equilibrium of the state. But, although the sculptors and painters were included in the class of artists, they appear to have had great connexion with the priests. The sacred scribes, or the grammatists, certainly prescribed the formula of the inscriptions intended to be engraved on stones; and they must have been instructed in the elements of drawing, to be capable of describing, by the outline alone, the different kinds of birds and quadrupeds adopted for hieroglyphics. Mr. Hasselquist, who examined the obelisk of the Matærea as a naturalist, acknowledges that the species of the different animals can easily be distinguished.

For sketching these inscriptions the priests used nothing more than a pen of the *papyrus* reed, as Orus Apollo and Clemens of Alexandria assert positively*. Therefore those characters, supposed to have been made with the pencil on the ancient stuffs of Egypt, were not the productions of the sacred scribes, but of painters; and it is in vain to attempt proving by them, that the Egyptians wrote like the Chinese, who, besides, employed only simple *styli* during many centuries; and the invention of pencils for writing is far from being so ancient among them as is generally believed.

It was not the custom in Egypt, as at Rome, to hang great numbers of votive paintings on the walls

* Hieroglyphica, lib. i. Stromat. vi.

of the temples. Those relative to shipwrecks always appertained to the altars of Neptune; but when the worship of Isis swallowed up almost entirely all others in Europe, such pictures were consecrated likewise to that divinity; and Juvenal could then say with some reason, that the Egyptian goddess maintained the painters of Italy*. Yet she was not so bountiful to those of her own country, who were chiefly employed in ornamenting a particular species of earthenware, in making figures or portraits on cups of very precious glass, in painting boats, swaddling-clothes, and cases of mummies, and furnishing designs for tapestry, and other variegated stuffs. The walls of great edifices, when once colored, remained so for many centuries, or rather for ever, as appears by the paintings now extant in the sepulchres of *Biban-el-Moluk*. These are really antique, while many others, supposed to be such, have been made by the Greeks and Romans, or the first Christians, who wrought as badly as the Goths.

The Egyptians do not seem to have used any particular procedure for making the colors and gilding adhere to the wall, or the bare rock, as some people have supposed. The Greek artists, indeed, seem to have employed some kind of preparation for that purpose; and it is called *pharmaca* by Pollux, when citing Isocrates. This generical term includes all the drugs esteemed necessary for a painter of antiquity except wax, which is particularly mentioned in

* ——— *Pictores quis nescit ab Iside pasci?*

the same article *. After what has been said of the climate of Thebais, and the extraordinary dryness of its grottos, particularly beyond the twenty-seventh degree of north latitude, it is not surprising that colors there should undergo so little alteration. Count Caylus says, that the manner of laying them on, practised by the Egyptians, was not favorable †, and they did, indeed, like all the Easterns, employ only virgin tints, and colored rather than painted.

We will explain in the sequel why all the inhabitants of those countries have entertained ideas so very different from ours, with regard to coloring. They refrain from all mixtures, and require constantly an extreme vivacity, similar to that of flowers, which can never admit of harmony, nor produce illusion. Thus, since the origin of the world, the history of the arts does not mention a single Egyptian painter who acquired the smallest degree of reputation by his works. Antiphilus and Palemon were Greeks of Alexandria, instructed in the principles of drawing by European masters; and the former, whom Quintilian praises on account of his great facility, seems to have contracted something of the Oriental style, as appears by his taste for the grotesque, of which he was in some measure the inventor. He cannot in fact be supposed to have discovered any traces of it in Egypt, where the Ptolemies found

* Onomasticon, lib. vii.

† Collection of Antiquities, Egyptian, Etruscan, &c. vol. i. Count Caylus had no very high opinion of Egyptian painting, and in this he was certainly not deceived.

nothing

nothing in the form, or deserving the name of portable paintings; and Aratus of Sycion first supplied them with a few he had collected in different parts of Greece*. The city of Alexandria, amidst an opulence almost inconceivable, and a luxury unexampled, remained always poor in master-pieces of this kind; for Augustus, who, after the death of Cleopatra, had possession of all the spoils of the Lagidæ, carried away only one murrin vase, and a single picture representing Hyacinth, painted by the Greek Nicias: whence we may infer, that he did not think the rest worthy of being exhibited in the capital of the world.

Corruption of taste, joined to a blind passion, rendered the emperor Adrian so partial to Egyptian statues. He is even suspected of having caused copies to be made for adorning the edifice, where probably the memory of Antinous was revered†, although with less scandal than in his great Egyptian temple. Alexander was ardently desirous of establishing something of the kind in honor of Hephestion; and nothing more absurd can be read than the letter he wrote, with that intent, to a villain called Cleomenes, who had loaded the Egyptians with continual vexations; for which a temple dedicated to Hephestion could have afforded little consolation.

* Plutarch in vita Arat.

† Among the statues found in Adrian's house at Tivoli, is one supposed to represent Antinous; but it seems rather to be the figure of an Egyptian priest.

It is here necessary to enter into some discussions concerning a remarkable passage in Petronius. The most learned commentators, such as Gonsale de Salas, Junius, and Gronovius, who have examined it with great attention, acknowledge that they comprehend nothing of the matter; and we cannot doubt but their avowal was very sincere. The corrupt sentence, so difficult to be understood, may be translated in this manner:—"Painting also has had another fate, since the audacity of the Egyptians reduced that art, so very extensive, into a compendium *."

Several conjectures have been proposed to solve this enigma; but Mr. Casanova is perhaps the only person who has imagined that Petronius intended to make the eulogium of the Egyptian artists, and inspire us with a high idea of their dexterity†. He would have been much less mistaken, if he had asserted quite the contrary. Others are of opinion, that it related to a manufactory established by the Greeks at Alexandria, or Memphis, where tapestries were produced superior in beauty to all that ever had been executed with the needle in Persia and Assyria. The loom, say they, reduced greatly the trouble and time requisite for the women of Asia, who knew no other method than embroidery. But Petronius, in fact, was too well informed, relative to the different arts, to confound *stromatechny* with painting; and

* *Pictura quoque alium exitum fecit, postquam Ægyptiorum audacia tam magnæ artis compendiarium invenit.*

† Treatise on different Monuments of Antiquity.

we know of none, even among the ancients, who ever fell into such confusion of words and ideas.

Neither is any reference made to the colored stuffs of the Egyptians. With them only one dark dye was used; and by the aid of acids and alkali, the cloth received three or four different tints. This in reality did not diminish labor; for it was necessary to trace, previously, all the figures with a feather, or a pencil, that the caustic and alkaline liquids might be distributed exactly on the places where they were intended to produce effect. Although the veil of Isis, so celebrated in antiquity*, appears to have been manufactured in this manner, it should be observed, that such stuffs were so far defective, that no white ground could possibly be preserved; for wax was rendered useless by a warm and even boiling dye.

Those who, like Christius, have thought to approach nearer than all others to the true sense of Petronius, suppose that he alludes to the manner of painting the walls of apartments in Arabesque or foliage†, after the hasty and rough manner peculiar to Eastern nations.

Under the horrible reign of Nero, the affrighted arts began to disappear in Italy, in the same manner that they fly from all despotic states; and as the progress of bad taste succeeded very rapidly, it is supposed that this species of decoration, taken from the Egyptians, was then introduced. The Romans would

* Le Moine de Melanophoris, ad calcem Harpocratis Cuperi.

† This is what the Italians call *Fogliatura antiquaria, grottescha*.

no longer hear of those great painters who, like Protogenes, employed five or six years on one picture. They sought colorers only who wrought very quickly, but their manner was wretched, and altogether fantastical. This is the reason why the greater part of the *Arbesques*, mixed with architecture, found in the ruins of *Herculaneum*, are as ridiculous, says Mr. Cochin, as the Chinese drawings*. Such productions, when once the hand is accustomed, may be executed with great celerity; but they cannot however be called *abridgments of painting*. The passage in Petronius very probably did not at all concern the Egyptians, but some copiers, through ignorance or mistake, wrote one word for another. Thus the original text might have treated of the ectypes†, or a particular mode of copying the best pictures, by taking the outline of the features, and coloring them afterwards in a proper manner. This was a fatal blow to painting; for drawing became neglected, as the great object consisted in procuring beautiful tints from India, which were never used but by daubers.

With regard to the Egyptians, if they had any singular manner of painting, some traces of it might surely be found in their own country; and certainly

* Observations on the Antiquities of *Herculaneum*.

† Instead of *Ectyporum audacia*, the copiers wrote *Egyptiorum audacia*.—Pliny indeed employed the word *Ectypa* in a different sense from Petronius, who used great licence in his figures and metaphors, which are sometimes good, but frequently exceedingly strained. Any tedious discussions of that point would here be useless.

none exist there. Some pieces in water-colors, on cement, or stone, seen in the Thebais, and representing, according to Paul Lucas, the play of children, are Grecian productions, without any extraordinary qualities. It is even doubtful, whether or not they were executed by men who merited the name of artists; for the greatest glory was supposed then to consist in making portative pictures, and not decorations *. The pieces alluded to resemble those discovered in the tomb of the Nafos, in that of Cestius, in the Thermæ of Titus, and finally at Herculaneum, where some, already bad enough of themselves, appeared still worse, because the subjects they represented were mistaken. At Naples, one was exhibited as the Judgment of Paris; but to me it appeared at once to be the Descent of the Shepherd Aristæus under the river Peneus. Thus, no person need any longer be torturing his imagination to explain why Paris is represented there with more than half of his body in the water; for he has nothing to do with the matter.

Pliny attributes to the Egyptians a particular manner of painting on silver; and if his expressions were to be taken rigidly, they could not easily be well developed. Thus he has been supposed to mean a kind of enamel, or varnish, spread on vases of that metal, somewhat like the black paste used for the Isian Table, which was afterwards incrustated with flakes of silver, on a ground of copper. But the Isian Table is a work

† *Nulla gloria artificum est, nisi eorum, qui tabulas pinxere.* Pliny.
executed

executed in Italy, and no otherwise to be considered as Egyptian than from the subject it contains. What Pliny mentions, we may be assured, was nothing more than a method of gilding by fire; and in this manner the figure of Anubis was represented on great sheets of silver, with the face invariably like gold.

As the laws relative to the dietetic system, already discussed in the preceding article, obliged the Egyptians to purify frequently, and very scrupulously, the vases employed in eating and drinking, they were right in having them quite plain. The gilding concealed no filth, according to Pliny, and was far more convenient than the chased work of the Greeks and Romans*.

Not to pass in silence any thing connected with the art of delineating, we must observe that the Egyptians were always supposed to have been very expert in drawing geographical maps, the invention of which is attributed to them by Apollonius of Rhodes, and Eustathius. It is astonishing to hear Clemens of Alexandria enumerating the many qualities requisite for the person who was chosen among the priests to be sacred scribe, or hiero-grammatist. He must be versed, says that author, in cosmography and geography; he must be acquainted with the course of the sun, of the moon, and of the five other planets; he must know the chorography of Egypt,

* Pliny speaks in these terms:—*Tingit & Ægyptus argentum ut in vasis Anubin suum spectet, tingitque non calat argentum.* Lib. xcix.

and every thing concerning the course of the Nile *. So many things could never have been arranged with any precision in the mind of one man, without the aid of drawings; and what idea must be formed of the maps then employed, when we reflect that the Egyptians never made any voyages either on the Mediterranean or Red Sea? Before the twenty-sixth dynasty, or that of the Saïtes, they seem to have had precise notions of no other country than of the interior of Ethiopia, of which Strabo is wrong to suppose them ignorant. The other circumjacent regions, such as Arabia, Judea, and Phenicia, were only known to them by the reports of the Nomade shepherds. With regard to the coasts of Greece, the isles of the Archipelago, Lybia inferior, and the western parts of Africa, their ideas were very vague. An intimate connexion most probably subsisted with the priests of Jupiter Ammon; but we have no proof that the celebrity of that oracle ever attracted many pilgrims or travellers from distant parts into the Marmarica, who could have given information concerning their different countries. Neither would such authorities have served to form maps, indicating, as we have been told, *the bearings of all the sea-coasts,*

* *Progreditur sacer scriba pennas habens in capite, ac in manibus papyri volumen, & vas scapi forma, in quo librarium atramentum (ηραφικόν μελαν) & juncus quo scribunt. Hunc oportet noscere illa quæ vocantur hieroglyphica & cosinographica & geographica, & ordinem solis & lune, & quinque planetarum, chorographiam Ægypti & descriptionem Nili, ut & apparatus sacrorum locorum, &c. Stromat. vi.*

and

and all the great roads of the ancient continent. Even supposing that some Egyptians belonging to the sacerdotal college of Sais, had really held such wonderful conversation with Solon, as Plato has introduced into his Atlantis, yet it would not follow that those Egyptians possessed any geographical knowledge, concerning certain lands situated very far westward; for nothing is more confused, and manifestly false, than what is related in the Timæus and the Critias.

What has been so much exaggerated by Clemens of Alexandria, may be reduced to the following just bounds. The priests could not have any other maps than single topographical paintings of Egypt, like that on the veil of Isis; and as all the lands of that country were measured, it was no difficult matter, by this means, to approach great precision. Besides, the course of the Nile, and the uniform direction of two chains of mountains extending from south to north as far as Memphis, rendered that operation practicable, even for those who were ignorant of theory. The priests, however, followed certain principles which they never affected to conceal; for they communicated them to the Jews, who made some use of the information under Joshua*; and afterwards they imparted them again to Thales, who transmitted what he knew to his disciple Anaximander; and he was said to have first introduced maps among the

* Jo^s. xviii.

Greeks*. In this manner, the science called geography was produced insensibly, as well as that prodigious collection of maps, supposed to exceed thirty thousand; among which the copies are in proportion to the originals nearly as eleven to one.

Independent of the general causes, unfavorable to the fine arts, among all the people of the East, it appears that the mythology of the Egyptians was founded on speculations, affording no resource whatever for either painters or statuary, who were forced to have recourse constantly to enigmatical and mysterious subjects, where few bodies ever resembled any thing in nature. While human heads were placed on the shoulders of animals, and monsters were multiplied without end, it became impossible to correct any faults, or soften the style of drawing. Many figures, composed without any model, were so fantastical, that they seemed to belong to a globe different from ours. Thus we find Apulæus, and Ammianus Marcellinus, speaking of certain symbolical images in ancient Egypt, and calling them *animals of another world*. This mode of expression is evidently metaphorical; yet some commentators have been so devoid of common understanding, as to conclude that the Egyptians were acquainted with America. They fancy they distinguish this, particularly in the terms employed by Apulæus, to describe the robe of painted stuff he had received at his initiation into the

* De veterum Geographia. Diogenes Laertius in vit. Anaxim.
mysteries

mysteries of Isis*. It was entirely covered with those emblematical representations constantly used by the Egyptians, and sometimes heaped in such quantities on the heads of their statues that they appeared as much crushed as Caryatides endeavouring to support a massy burden.

The Greek artists, to render the divinities they received originally from Europe more majestic and imposing, discharged as many attributes as possible from their heads, and never added any hoods so disagreeable as those placed frequently by the statuaries of Thebes and Memphis on statues of Osiris, Isis, and particularly on the Colossus of Memnon. This appears to have been a bonnet woven with the leaves of two different kinds of palm-trees, one of which has the botanical name of Phoenix, and the other is peculiar to the Thebais †.

Mankind, in warm countries, have inclinations very opposite in their nature. The Spaniards are exceedingly grave, and yet passionately fond of dancing: when the peasants, towards the evening, hear the sound of a musical instrument, they cannot refrain from leaping and frisking like the negroes. The Egyptians had not exactly that disposition, but inclined, from their gloomy character, to melancholy, and possessing great quickness of imagination, they fluctuated constantly between extremes, without

* *Quaqua tamen viseres, eclare vario circum notatis insignibar animalibus; hinc dracones Indici, inde gryphes Hyperborei, quos in speciem pinnatis alitis generat mundus alter.* Lib. xi.

† Palma Thebaica, dichotoma, folio stabelliformi.

being able to find a medium. Thus their statuary either produced colossal statues, or such very small images as were carried in procession on shrines, made like boats, or similar to those which, under the form of pigmies, represented the nine cubits of the increase of the Nile*. If such people had been abandoned to themselves, their allegorical compositions would have become so whimsical and numerous as to be altogether unintelligible. But when such changes appeared dangerous, the priests interfered; and they would no longer admit any innovations in exterior worship, after having added five days to the year, which seems to have been the last of their essential acts. It is unfortunate that this interesting epoch in their history cannot be ascertained with any precision. Warburton and Shuckford, indeed, place it in the year of the world two thousand six hundred and sixty-five; but nothing is more absurd and ridiculous than to date here from the beginning of the world, the era of which is a thousand times more uncertain than that of the invention of the Epagomenes. Newton endeavoured likewise to determine the same thing, but four hundred years difference appears between his

* It was by the Greek sculptors that these dwarfs of a cubit high were changed into sixteen children of the Nile. We see an example of this in the statue described by Pliny, and another mentioned by Montfaucon, *Diar. Italic.* cap. xx.

The allegorical style of the Egyptian priests is said to have given rise to the fable of the pigmies of Ethiopia, and their battles with the ibis, which advances or retires in proportion as the Nile falls or rises.

calcu-

calculation and the two others we have mentioned. Indeed, even until the present day, it has never been known that three chronologists have agreed perfectly on the same point*.

When this prohibition took place, the sculptors must have taken to copying the ancient models, and they even adopted one species of physiognomy for all their statues, without ever deviating either in air or features. According to this standard, the chin was exceedingly small, and very round cheeks, as Mr. Winkelman has observed, formed a characteristic of all the engraved statues of Egypt†. When taking the outline of heads, as they are seen in full face, the Egyptians seem to have preferred a circle to an oval; they drew the eyes obliquely, raised them as much as the forehead, and caused the angles of the section of the lips to turn upwards. The Greeks, on the contrary, made them descend, and when any dispute arises concerning corporeal beauty, the judgment of the Africans should never be put in competition with that of the Greeks.

When the ridiculous system was adopted in Europe, of making the Chinese descendants of the Egyptians, the physiognomy of the former was supposed to be evident on the ancient statues of Egypt; and the illusion became so great, that even the mummies were believed to discover the same resemblance.

* On the institution of the Epagomenes we may consult the Sacred Chronology of Mr. Vignoles, and the Egyptian Calendar in the Memoirs of the Academy of Inscriptions.

† Description of Engraved Stones, by Baron de Stofsch.

Yet the lineaments must be totally changed, not only from the effects of time, and the drying up of the flesh, but also by the operation of removing the partition of the nose, in order to extract the brain through the nostrils, and afterwards fill the skull with resinous matter. This being always the case, the appearance of the face was changed, and flattened something like that of the Chinese. We may ascribe to this circumstance what Dion relates of the emperor Augustus having disfigured the mummy of Alexander the Great; because he touched the nose precisely on the place where the cartilage had been taken away by the embalmers.

To apply to ill-made statues and dead bodies on such matters was altogether absurd, when an opportunity presented itself of examining the modern inhabitants of Egypt, who are undoubtedly descended from the ancient Egyptians; but the Coptes have no resemblance to the Chinese, who are a race of Tartars, preserving the original characteristic of having thin beards, little eyes, and flat noses. We see from this, what should be thought of all those frivolous proofs which have been adduced on so important a subject.

The artists of Egypt continued to work, in all the exactness of the first style, until the reign of Ptolemy Philadelphus. The establishments made by the Greeks in the *Delta*, under Psammetichus, were entirely commercial, without affecting the arts; which underwent no revolution during the conquest of the Persians. Plato says, that in his day the Egyptians had
changed

changed nothing, either in their painting or sculpture: their productions at this moment, says he, resemble exactly what they have been from time immemorial: they discover nothing more finished, neither are their productions at all more imperfect. Thus the journey of that philosopher into Egypt affords an epoch truly remarkable, to which modern authors do not appear to have even adverted. On the contrary, the general opinion is, that the ancient style was abandoned on the invasion of the Persians, who, under Cambyfes, were yet barbarians; and who, far from bringing artists with them, took some Egyptians to erect some fabrics in their own province, and the ruins of one are still found beyond Araxes, now called *Bend-Emir*.

Why the manners and customs of the Persians did not make any impression on the minds of the conquered, is a circumstance that can be explained very naturally. In the first place, the emperors of Persia never resided in Egypt: they reduced it to a province, and sent thither governors, or grand satraps, who resided at Memphis; and the greater part of the Persian troops were cantoned round that town, as a check on the Delta, as well as on the Thebais. The Egyptians, unable to support the severity of the yoke, revolted frequently; and the consequence of war was the pillage of every thing sacred and profane. Even the archives of the temples were seized; and it is difficult to conceive how the priests of Egypt could, in that instant of calamity, have collected sufficient ready money to purchase back the wrecks of their libraries

libraries from an infamous eunuch of Ochus, who required a prodigious ransom for what had fallen into his possession. After this, we may well believe that the Egyptians conceived the greatest horror for every thing practised by their oppressors. But the case was very different, when, after the death of Alexander, Egypt was governed by foreign princes, who resided there, and restored the ancient civil forms of the kingdom. The three first Ptolemies conducted themselves in such a manner as to insure the affections of the Egyptians: barbarians destroy by oppressing; but they were men, sensible to every species of glory, who caused all the arts to flourish. Under their reign the Egyptians, by imitating the productions of Greece, or perhaps from having seen the Greeks at work, began first to soften their style. The latter had every advantage with regard to drawing, but none whatever in the temper of the instruments, or in the art of using them: for the Egyptians excelled in preparing steel, and they succeeded perfectly in polishing such refractory substances as the different kinds of basalt. They understood besides, equally well with the Greeks, all the mechanism relative to engraving on precious stones. It may be excusable to repeat here, that the researches undertaken to determine the origin of this art in Egypt have been fruitless; and Bochart affords nothing satisfactory in the article where he treats of *schamin* or *samir*, which he takes for emery*.

* Hierozoicon, tom. ii.

Thus

Thus it may be affirmed, that the Egyptians, from time immemorial, have known how to cut jewels; and this is the more surprising, as those of their country are extremely hard. No comparison can be made between the real smaragdus, or emerald of Thebais, and that of Peru, which yields even to the points of pyrites. Besides, it has long been known, and better now than ever, by experiments made on the diamonds of Brazil, that all the stones of America, without exception, are less hard than those of the ancient continent; and this seems to proceed from some deluge in the new world, posterior to the time of our cataclysm.

Some restrictions should be made to what Count Caylus advances of the extreme scarcity of Egyptian stones in relievo. Several are found besides those mentioned by Natter*, and some represent the military scarabees, not only wrought on the convex side, but likewise hollowed out on the flat part. The little inclination testified by the Egyptians for bas-reliefs, seems to have influenced them in this, because it cannot be supposed that so many intaglios were made for signets, since we are assured by Pliny that they never sealed their acts, but considered the writing alone as sufficient†.

From all the details adduced here, we may conclude, that neither the want of instruments, nor any difficulties of procedure, prevented the Egyp-

* Treatise on the Method of Engraving.

† *Non signans Oriens Egyptus, literis etiam nunc contenta foliis.*
This rule, most probably, had some exceptions.

tian artists from attaining some degree of perfection: but they failed constantly in design, and their compositions were destitute of taste, nobleness, and grace. This obstacle, so fatal to their career, had its origin in the organs and genius of the people; and the priests have been blamed for not introducing music to moderate and soften their imagination. Diodorus Siculus assures us, that this method appeared to them very dangerous, and calculated to enervate the mind, as much as wrestling does the body. Such positive expressions might lead us to believe that the Egyptians had absolutely no music; but the truth is, they did possess a species equally detestable with that still heard among all the nations of Africa and southern Asia.

By examining the construction of a *sistrum*, either of silver or brass, any person must perceive that instead of harmony it can only afford a shrill sound, which, joined to the tones of a wretched flute called *chnone*, and the bellowing of the ox *Apis*, produced that concert described by Claudian in imitative verses *. With regard to the other instru-

* ——— *Nilotica sistris*

Ripa sonet, pluriesque modos Egyptia ducit

Tibia, submissio admegit cornibus Apis.

The Abbe Winkelman is deceived when he maintains, that the *sistrum* was a new instrument in Egypt, because he did not find it in the hands of the Egyptian statues at Rome. It was not even allowed in Egypt to introduce new musical instruments; and beside, a *sistrum* with a cat's head is seen in the hands of a very ancient female statue which has been taken for Isis. This decisive monument is now in England; and if Winkelman had read Bouchart's *Inquiries concerning the Sistrum*, he would have changed his opinion.

ments,

ments, such as the flageolet, the horn, the pipe of barley straw, the castanets, the organic triangle, or the *tebuni*, the tabor, and a particular kind of flute mentioned by Pollux and Eustathius, it is easy to conceive the nature of their melody. Thus the priests would never suffer any such noise in the interior of the temples, where they chaunted the sacred hymns, without any instrumental accompaniments*.

The author of a work published in one thousand seven hundred and sixty-eight, asserts that the musical system of Pythagoras, supposed to be that of the Egyptians likewise, is exactly followed by the Chinese. So far from being able to prove such a whimsical opinion, it falls of itself, when we consider the essential difference between the instruments of China and of ancient Egypt. We shall not examine the reality of the system of Pythagoras, such as some have endeavoured to demonstrate it in our days; but the chief circumstances on which it is founded, seem to be of such a nature that many nations might have practised them without having any communication with each other. We cannot therefore be reasonably astonished, if some traces of that nature were found in what, from great exaggeration, is called the *Chinese music*; for, by the avowal of the Jesuits themselves, it does not merit that name in any sense whatever†; and besides they have observed, that the airs they heard at Canton resembled those of all southern Asia. Tra-

* Tract. de Elocutione Demetrii Phal. aut Scriptoris incerti.

† Du Halde's Description of China, vol. iii.

vellers, on visiting that part of the globe, have instantly perceived that the men there required to be constantly excited to action and labor by shouts, or by such noise as is made on board of the vessels of Japan, China, Siam, and all the islands of the Indian Archipelago, to encourage the rowers. In those countries, says Chardin, the workmen cannot lift a beam, nor carry a stone, without shouting; and he justly attributes this to the slothfulness of their mind, which requires constantly to be awaked by rude or shrill sounds, like those of the tabor and flute, which are instruments common to all the warm regions of the two hemispheres. Soft and melodious sounds would not make sufficient impression on the organs of these people; and this is the reason they can never make any progress in music. Thus the priests of Egypt could not have succeeded by that means in producing any revolution in the genius of their artists.

We shall now speak more particularly of China, and begin by observing that Gio Ghirardini is the only one of all the European painters who has published a relation; and it contains, in few words, his opinion of the Chinese, whose works he had contemplated at Canton, and at Pe-kin, where he remained for some time to paint the cupola of a church. *These people, says he, have not the smallest idea of the fine arts; they know, in fact, nothing more than to weigh silver and eat rice* *. That an Italian artist

* Voyage to China in the year 1698 by Gio Ghirardini.

should

should be shocked at the frightful daubings of the Chinese is not extraordinary, when the Tartars themselves could not endure the sight of them. Thus the four emperors who have last reigned there, employed only European painters at their court, without even being blamed by either the presumptuous *Ham-lin*, or the gravest among the men of letters, who were as sensible of the incapacity of their nation in such matters as of their own, when it was proposed to make faultless almanacks.

The first Jesuits, who undertook to decorate the imperial palace of Pe-kin, were scholastic theologists, destitute of all ideas of handling the pencil: but fortunately they found a lay-friar, who having ground colours in Europe, undertook to paint in China; and what is more, he was applauded. When the missionaries perceived that the office of first painter to the court became of great importance, they had it granted to priests of their order, who now exercise that art at Pe-kin, where the Tartars are incapable of estimating their capacity; and they only perceive, that whatever comes from their hands, surpasses greatly the wretched performances of the Chinese.

These monks, and particularly Father Attiret, of Avignon, drew the plans of the battles gained by the Mandhuis, in one thousand seven hundred and fifty-four and fifty-seven, over the Eleuths, Sdongares, and Kof-chiots, who were said to have been not only vanquished but exterminated. This, however, does not seem probable; for these wandering nations of Great Tartary fly sometimes to distant places after a defeat,
and

and having disappeared for some time, they return insensibly, and re-assemble by degrees. Besides, if we are well informed, some of the remains of those hordes have taken refuge on the territory of Russia. When the plans of the battles were finished, no person in all China was capable of engraving them. Neither, indeed, is any thing on copper-plate executed in all Asia, where paintings are too much despised to be multiplied by an instrument which requires more patience than the Easterns are capable of exercising. The Indians, who cut the moulds for painted cottons, expedite their work in an astonishing manner; and therefore they never attempt etching, which would retard them unavoidably.

In the reign of the emperor *Can-bi* the Jesuits, to attract the people to their churches, caused the walls to be painted in the European manner; and this artifice succeeded beyond expectation, even at *Tam-tcheou*, says Father Gabien, where the person employed was a bungler. What struck the Chinese most were drawings in perspective; and the Emperor, it is said, put his hand on those presented to him by Father Broglia; because, like the blind man on whom the operation for the cataract was performed in London, he supposed the surface must really have been uneven. Ghirardini, who painted a colonnade, and different parts of architecture, at Pe-kin, passed for a forcerer, who deluded the people by his spells. Savages wonder at nothing; while ignorant men admire every thing; and Ghirardini, who was not much flattered by the applauses of the Chinese, returned

have no idea of either glory or ambition; and every thing there goes by calculation.

The *Hou-pai* are generally attached to some manufacture, particularly of porcelain, where, in former times, they received stripes, whenever any vase was injured; or the coloring chanced to run over the outlines while in the fire; and they always supported this treatment patiently. But the workmen who turned the moulds, and those employed in preparing the paste, which is no trifling labor, instead of submitting to such oppression, threw themselves sometimes into the burning furnaces, to terminate their miserable existence. In that, the Mandhui Tartars have debased the power of the mandarines, who formerly ruled over the artists in a barbarous manner, but since the conquest. The inspection of the manufactures was committed entirely to infamous eunuchs, who are all obliged in turn to pay tribute; and the Mandhui have acquired a direct influence on every branch of industry there. In this consists a part of the Chinese people, whose institutions are in every respect exactly opposite to those of the ancient Chinese, so far from thinking of a more equitable system as that of rendering property hereditary in families, did not even confine the nobles to their own classes; and every person could become a bonze, or even a robber. Yet in China, as with the greater part

truth and genius, the same thing can be said of all the paintings of southern Asia: there the most precious coloring substances are found in profusion; yet the inhabitants have never known how to take advantage of this gift of nature.

The Chinese give the general name of *Hoa-pei* to those miserable wretches who paint cabinets, great lanterns, china, and the glasses brought from Europe. They are the poorest artisans in the whole empire, and scarcely earn enough to live, although they work very rapidly, and employ all their children at the age of six or seven years. By this their hands are spoiled for the rest of their days; because, by painting before they know any thing of drawing, they become daubers like their fathers. Those pupils who have least genius, acquire a knowledge of very few contours: some are only capable of drawing branches, and others of adding the leaves, which, besides, are very badly represented. Generally speaking, indeed, none of the Asiatic painters are very able in that part of their art which regards the foliage of trees.

Father Parrenin perceiving the impossibility of concealing from Mr. Mairan the ignorance of the Chinese in astronomy, pretended, as an excuse, that this did not proceed from want of genius, but that astronomers there were badly paid. Painters, however, are still less encouraged, and the man who would there devote thirty years of his life in acquiring some knowledge of his profession, could not afterwards defray his expences; for the people of that country

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have

have no idea of either glory or ambition; and every thing there goes by calculation.

The *Hoa-per* are generally attached to some manufacture, particularly of porcelain, where, in former times, they received stripes, whenever any vase was injured; or the coloring chanced to run over the outlines while in the fire; and they always supported this treatment patiently. But the workmen, who formed the moulds, and those employed in preparing the paste, which is no trifling labor, instead of submitting to such oppression, threw themselves sometimes into the burning furnaces, to terminate their miserable existence. In that, the Mandhui Tartars have moderated the power of the mandarines, who tyrannised over the artists in a barbarous manner, previous to the conquest. The inspection of the manufactures was committed entirely to infamous eunuchs, who were all obliged in turn to pay tribute; and thus the sovereign acquired a direct influence on every thing executed there. In this consists a part of the slavery of these people, whose institutions are in every thing almost directly opposite to those of the ancient Egyptians. The Chinese, so far from thinking of such an impracticable system as that of rendering professions hereditary in families, did not even confine them to tribes or classes; and every person could chuse his line of life, and become even a bonze, or begging monk, which is the most despicable state of all, without excepting even that of a robber. Yet the arts have remained in China, as with the greater

part of the other Eastern nations, in a kind of *eternal* infancy.

All these considerations may have led to believe, that the inhabitants of those countries possessed an inventive turn alone, and were destitute of capacity in improving a discovery. It is necessary to observe, on this point, that among them the history of arts and trades is covered with much darkness; because they never piqued themselves on writing with truth and candor. Thus, the discoveries made by the Chinese cannot be distinguished clearly from those they owe to the Indians, who seem to have carried the mode of stamping cotton with moulds into China; and the progress from this to printing books was very trifling. Nothing is more despicable than the manner in which the Chinese shuffle and contradict themselves, when they endeavour to explain the real epoch of the invention of printing. They assert, that they possessed that art fifty years before our era; and the annals of the empire say it was not practised until the reign of *Mingtsung*, who, according to the chronology adopted in Europe, ascended the throne in the year nine hundred and twenty-six of the present era. Even in this calculation the period must have been antedated near two centuries, according to Father Trigault, who wrote in the year one thousand six hundred and fifteen; for he affirms that the Chinese cannot produce any proof of any edition having been printed previous to the year eleven hundred *.

* *Expeditio apud Sinas.*

We have only to consult the monuments in our possession, relative to the ancient state of commerce and arts in southern Asia, to be convinced that the Indians were the inventors of printing; and the stuffs colored in this manner have always, as well as at the present time, formed a considerable part of their commerce, as we see by what has been written by the dubious author of the *Periplus of the Erythræan Sea*. They were at all times covered with the strangest representations of fantastical figures *, which originate in the exalted ideas of Oriental nations, as well as in their ignorance and passion for allegories. Chimerical monsters are easily painted; while nothing is more difficult than to delineate animals, because the smallest deviation from the real form and proportions takes away the resemblance. More artificial flowers are made in China than in any other country of the world: but a botanist, who had an opportunity of examining the different plants in their natural state, asserts, that of all those manufactured and sent to Europe, not one is exempt from some monstrosity. Either the leaves belong to a class different from the stalk on which they are placed, or some such extravagant licence is discoverable also on

* Even Claudian speaks of the painted stuffs of Egypt:

Jam cochleis bomines junctos & quicquid inane

Nutrit, in albatis quæ pingitur India velis. In Eutrop. i.

This is the right way of reading this verse, instead of *Atalæis*, *Judaicis*, or *Isfacis*, as we find in some editions. The passage in the Book of Job, which was thought to respect the stuffs of India, alludes to nothing of the kind. The error was occasioned by the Latin translation.

the calice and parts of fructification. From this example, an idea may be formed of the confusion predominant in the minds of all the Chinese workmen, who, carried away by their imagination, are incapable of studying nature. It must however be admitted that the strange ideas entertained there concerning corporeal beauty must, in some measure, take away from the painters and sculptors the possibility of giving nobleness to their figures. Both must conform themselves to the reigning taste, and represent even the gods with very big bellies. This characteristic is remarkable in all the numerous figures of *Niniso*, who resembles a dropical person, and sits on his heels like an *orang-outang*. Nothing could be imagined more opposite to the majestic air communicated to the divinities of the Greeks, than the physiognomy, corpulency, and whole deportment of the frightful *Niniso*.

It is believed that the custom of fastening the robes with a girdle, constantly practised by the Chinese, has made them consider the protuberance it frequently occasions as a great perfection in the human body. But this prejudice, which has found its way even into Russia, may have originated among the Tartars, who, from being constantly on horseback, contract more or less such defects; and Hippocrates seems to indicate something of the kind proceeding from equitation among the Scythians. What the Chinese have taken for a mark of beauty among the men, they consider as a shocking deformity in women, whose bodies they suppose should be slender and delicate.

When

When they took to bruising the feet of the fair sex, all such whimsical opinions must have followed, like necessary consequences. Thus, while the mandarines gorge themselves with every thing considered as most nourishing, such as nests of birds and tendons of stags, in hopes of acquiring corpulency to fill a sofa at the tribunals, the women fast through fear of becoming too fat. Those dames who suppose that the mind is rendered servile by industry, take care to let their nails grow to the utmost, and to preserve them from injury during the night, they are provided with sheaths of bamboo, or metal. These claws, joined to the extreme length of the eyelids, acquired likewise by art, would produce no effect on the men, unless they were accompanied with such delicate waists as neither their painters nor sculptors have known how to copy exactly. Sometimes they draw figures of women monstrous from their height, in proportion to the thickness and roundness of their limbs. Many such lank bodies are seen on the old china ware; but this ridiculous style is somewhat softened by the conquest of the Tartars, who neither think like the Chinese, in point of beauty, nor female qualifications.

The *Haa-pei*, indeed, have been accused of rendering all the faces they draw unnaturally ugly, and of making nothing but caricatures, as we are informed by Father le Comte *. But the truth is, that these daubers become masters of a certain number of out-

* New Memoirs on China, vol. i.

lines, entirely by dint of practice; and these they repeat continually, precisely like the painters in India, whose pictures contain sometimes from eighty to a hundred figures, where all the women have the same features, and the men likewise. This mode of having but one physiognomy for each sex, is the surest proof that their whole knowledge of drawing is only practical. It seems very probable, that some travellers have been deceived in attributing to the Chinese a knowledge of fresco: for the decorations of the pagoda of *Emoui*, cited by them as examples, are apparently in water-colors. Neither can they be considered as very ancient, because they refer to the worship of *Fo**, like all the other pagodas of the empire, if we except perhaps those of *Taoïse*. Our information with regard to the interior of the latter is very inexact; but it is reasonable to suppose that they likewise contain Indian symbols.

As the edifices of the Chinese are not constructed to resist many centuries, it is not extraordinary that no antique paintings should be found among them: but what Nieuhoff relates in the most positive terms of their having no ancient statues, is indeed very surprising†. Not one well-informed person has ever considered as authentic the likenesses of Confucius, said to be taken during his life. Even admitting that some Chinese statues did actually exist ever since that epoch, they could not be very remarkable for their antiquity. Herodotus is supposed to have writ-

* Salmon's Present State of China, vol. i.

† Algemeene Beschryving van't Ryk Sina.

ten towards the year four hundred and eighty before our era, and consequently in the life-time of *Confucius*, according to vulgar tradition; for his history is totally unknown. When Herodotus visited Egypt, he saw statues there already decayed by time, although they were probably made of sycamore wood, which is astonishingly durable in the chests made for the mummies, when impregnated with a certain alkali to prevent the attack of worms. These statues, falling to pieces with age, at the period when Confucius is supposed to have lived, were indeed very ancient monuments.

Some investigations, still more profound than those of Nieuhoff, would indeed be necessary; although he followed the course of the great canal between Canton and Pe-kin. On this road, traversing the centre of the empire, nothing hitherto has appeared more ancient than the *van-ly*, or great wall; and so much is the history of this country filled with obscurities and contradictions, that we cannot know really in what year that astonishing work was undertaken.

With regard to the colossian statues made of clay or plaster, either painted or gilt, they have been found in great numbers from the twenty-first degree of north latitude to the fortieth; and from the western extremity of *Chensi*, as far as *Voan-teng*, the most eastern cape on the Chinese territory. But all these were certainly executed at periods still later than our present era; as is demonstrated by the very symbols of those idols which relate to the religion of India.

India. No statues, invested with any attributes of Egyptian divinities, have ever been found in all the extent of the empire; and nothing can be more opposite to the style of the artists of Egypt than the manner practised by the Chinese. This will appear still more striking, when we shall endeavour to compare the architecture of those two nations, resembling almost in nothing; and certainly not in the *dragon* and the *fom-boam*, as Mr. Mairan maintained erroneously.

Some details cannot be dispensed with here, relative to those fabulous animals so frequently represented by the sculptors and painters of China. The dragon on the standards, liveries, and robes of the emperors, is called *lu* in the Chinese language. This word is found in several dialects of the Tartar, and particularly in Calmuc, Mogul, and Turkish, without varying in signification, or even in orthography; for it is written in the same manner by Abulgazi in his *History*, and Ulugh-Beigh, nephew of Tamerlane, in his *Epochas*. This conformity has led me to suppose, that the Chinese dragon was the principal armorial sign of the Tartar hordes, when they made some establishments in Thibet and the province of *Chenfi*. It is the opinion of a German author, that this species of monster, painted in a rude manner on their banners and bucklers, gave rise to the celebrated fable in Scythian mythology, concerning the combats of the Arimaspes with the Grifhons *. The Moguls,

* Beer in der Erläut. zur allg. Welth.

who conquered China in the thirteenth century, and the Mandhuis, who succeeded them in the seventeenth, respected equally this symbol; and their adopting it, without any change whatever, proves how much they were convinced of its having originated in Tartary. Thus all the Chinese historians agree, that the emblem of the dragon is as ancient as their first founder *Fo-hi*. It would be in vain to object that the Mandhuis were unwilling to render the vanquished desperate, by forcing them to renounce the arms of their ancestors; for these conquerors were not moved either by prayers or tears, when they formed the resolution of making the Chinese change their dress. Nothing could prevent them from executing this scheme, dictated by the soundest policy; and it became necessary for every person to abandon his ancient garb, or fly with those who went to Batavia to preserve their long hair.

The absurdity is therefore evident of endeavouring to find in this dragon the crocodile of the Nile, called by the Egyptians *chamsa*, a word resembling in nothing the *lu* of the Chinese. The latter besides speak a monosyllabical language, while that of ancient Egypt, on the contrary, contained polysyllables; and a greater difference than this cannot be imagined between any two nations of the earth.

Mr. Mairan is exceedingly deceived, when he pretends that the crocodile was seen on the coat of arms of the Pharaohs*; and a little knowledge of mythology

* Letters to Father Parrenin concerning China.—Mr. Mairan pretends that no crocodiles exist in China. Father Martini, Nieuhoff,

logy would have made him perceive that it was the emblem of Typhon, or the evil spirit, except in some towns situated on artificial canals, very distant from the course of the Nile.

It is true that a Jew, to insult a king of Egypt, uses the term *Great Dragon*, or *Thamin*, in comparing him insolently to the crocodile. From this odious appellation, suggested by that national hatred subsisting between the Hebrews and Coptes, nothing more can be concluded than that injurious language has been used in every age.

The fact, however, is, that Ælian describes, better than Diodorus Siculus, the species of symbol carried by the kings of Egypt in their diadem. He calls it expressly the spotted asp^{*}; and this is exactly the thermutis, or sacred serpent, which bites its own tail. Placed likewise on the head of Isis to indicate power, and well known in the different monuments, it had no more affinity or connexion with the dragon of China, than the fleur-de-lys of France with the thistles on the escutcheon of Scotland. Thus the errors propagated on this subject, have been no less monstrous than the supposed animal to which they alluded.

hoff, and some other authors, affirm that some are found in the river Go.

* Hinc Ægyptiorum reges in diademate variegatas aspides gerere intellexi, per figuram istius animalis invictum imperii robur significantes. De Nat. Animal. lib. vi. According to Diodorus this emblem varied in Egypt with the whim of the sovereign, who carried sometimes on his diadem the head of a lion. But we have reason to believe that he was not well informed in that matter.

It

It is easy to demonstrate clearly that the *fom-boam* has no connexion whatever with the phoenix. The Chinese have never known any thing of the canicular cycle, composed of fourteen hundred and sixty-one years; and consequently it could never be called the *phœnix*, because that word is used to denote nothing more than the accomplishment of the revolution, which brings back the heliacal rising of Sirius to the first day of the month *Thoth*. The bird *fom-boam*, represented with a tuft of feathers on its head, according to the figure published by Father Bouis, appears to be the same symbol with the puet, so much celebrated in the mythology of the ancient Indians; and for further details it is sufficient to refer the reader to *Ælian*.

Sculptors, properly so called in China, are nearly equal in number to the potters, or those who mould figures of clay, plaster, and porcelain paste; and the occupation they procure from the bonzes is much greater than could be believed, were it not known that these fanatics increase constantly the number of their idols. About a century ago, the Dutch ambassadors, who went to Pe-kin, visited a pagoda supposed to contain near ten thousand such figures, from the height of half a foot to the size of a colossus, ranged on shelves like books in a library. Besides the images kept in temples, each Chinese possesses a certain number in his own house; and those who pass their lives in barks on the great rivers, construct chapels to contain a considerable number. If we add to them the total quantity, computed at five or six million, distributed

distributed in Europe, then we may be satisfied that the potters in China are not idle; although they would be much better employed in tilling the barren lands of *Koei-tcheou* than in producing such rude and useless trifles. We do not speak here of certain statues in stone, which are unquestionably what these artists have made most tolerable; because the amplitude of the draperies generally conceals the members most difficult to be executed, such as the hands and feet. When such parts remain uncovered, they are always maimed, from a total ignorance of anatomy or osteology; for these people, in learning to draw, never use a skeleton. Whatever good model may be set before them, they cannot refrain from falling into their usual contours; and while endeavouring to imitate the groups of figures on Saxon ware, they constantly insert Chinese features. It is not only necessary in all vases and pieces of porcelain of some importance, to give them models, but likewise in certain damask stuffs; otherwise the merchants of Europe would be very badly served.

The sculptors in China have always had an evident advantage over the painters, who encountered far greater difficulties in all their attempts to attain some knowledge of coloring, as well as the principles of the *claro-obscuro*, and of perspective. As they could not reach these essential points of the art, they must of course have remained behind; and even when their drawings were equally correct with those of the sculptors, their pictures were still inferior to the statues and bas-reliefs.

iefs*. What is evident here with regard to the Chinese, has been equally so in all other countries of the world, without even excepting Greece. We find, there, that statuary had been carried to the utmost degree of excellence attainable by man, while such celebrated painters as Polygnatus transgressed all the rules of perspective. What is still worse, they did not suspect that their paintings were defective; and so far from having arrived at perfection, they could not discover in what it consisted.

The arts most cultivated by the Egyptians are precisely those totally unknown to the Chinese. Without speaking of glass, concerning which they were ignorant until the reign of *Can-bi*, they certainly never made any progress in the engraving or even polishing of precious stones. *It appears, says Mr. Belt of Antermony, that these people do not esteem diamonds: few are seen among them, and those they do possess are as ill cut as all their other jewels.*†

The Chinese, contrary to the custom of the Egyptians, make great use of signets; but the emperor only has one of stone or agate. The ectypes brought into Europe have the appearance of being cut with the same point of diamond employed by the Chinese in piercing broken porcelain, when they endeavour

* The Chinese make a kind of bas-reliefs, something similar to those on Trajan's pillar, where the figures, formed separately, are cut flat on the back, and fastened to the building. This method however is not followed in the ornaments of the frieze of the *Pai-leou*.

† Journey from Petersburg to Pe-kin, vol. i.

to stitch it with brass wire. Some pretend, erroneously, that they have recourse to sulphur, in the same manner that it was employed by the Romans in repairing broken vases of glass.

One circumstance, of the utmost importance, concerning which the Jesuits have constantly attempted to deceive us, is, that the porcelains of the first quality, best baked, and most carefully painted, as well as the fine varnished or lackered productions seen at Pe-kin, and in the other great towns of China, are all brought from Japan. Although Father du Halde has had the assurance to deny this fact, the best-informed travellers and merchants have never formed a doubt in that respect. Independent of the journal of Mr. de Lange, cited in the note *, we know that all the porcelains given by the emperor of China to Mr. Ismailoff, as presents to Czar Peter the First, were certainly manufactured in Japan, where all the arts and trades are more cultivated than in China. The plates for printing, in particular, are much better engraved at *Meaco* than at Pe-kin; and, besides, the Japanese have never followed the destructive mode of sophisticating the colors, and principally the blue, in painting porcelain. With them the magistrates who inspect the manufactories, do not permit any alterations to be made in the paste, or any other coloring substance, to variegate the enamel. The Ja-

* "The most beautiful varnished furniture, such as cabinets, chairs, tables, baskets, and other things of that nature, as well as the finest china ware, come to Pe-kin from Japan." De Lange's Journal. Consult also Osbeck's Voyage.

panese are not the only people who dispute the invention of porcelain with the Chinese; for we shall see, presently, that it is claimed likewise by other Asiatic nations; and what appears most singular is, that these disputes extend even to gunpowder, and the compass. Without entering into any discussions on these matters, we have reason to suppose, that not one good magnetic needle is to be found in all the extent of China, except such 'as are brought from *Nangasaki*. These seem to have been prepared in the interior of Japan, and *Mia*, where, according to the maps of Tavernier, the productions in steel, and in particular several blades of different kinds, are of an excellent quality*.

The ancient government of the *Dairis*, although in some measure feudal, and consequently subject to great inconveniences, appears however to have been less unfavorable to arts and sciences, than the present rigid despotism, introduced by that monster *Fide-Schoffi*, who, born in a cottage, died on the throne in one thousand five hundred and ninety-eight. The troubles excited by the different *cubos*, were scarcely more tolerable; but from being only temporary, they were infinitely less pernicious than arbitrary power, which continues without interruption. By considering the ancient inhabitants of Greece, in their frequent civil wars, and the modern Greeks changed into brutes under the Ottoman yoke, some

* The latitude and longitude of *Mia* are badly set down in Tavernier's Map: that of Bellin is by far more exact.

just opinion may be formed on this matter. Kempher informs us, that in the eighth century, Japan had produced sculptors whose memory was revered* : but since the new regency, no person is honored ; because honor and despotism are as incompatible as vice and virtue.

Although the Japanese wares have some resemblance to those of China, yet it is easy to perceive that they possess far more regularity in the contour, more truth in the details, and more meaning in the coloring. Some artists of that country have even painted flowers, plants, birds, quadrupeds, and fish, tolerably conformable to nature. Such isolated objects are far from constituting pictures where any thing can be discovered relative to perspective, and the art of placing figures in groups. Those people are grossly deceived, who imagine the Japanese, from having succeeded in some colored drawings, are capable of attempting either landscapes or historical paintings. The prince of Orange possesses perhaps the completest collection extant of Asiatic drawings of plants and animals : but whether they are from Japan, or some other country, we have not been able to ascertain. At all events, these productions have a right to be included in what Mr. Osbeck says of Chinese painting ; the colors, he observes, are so beautiful, that they inspire some indulgence for those who have employed them so awkwardly.

* History of Japan, book ii.

If a scale were made for the Eastern painters, like that composed by Mr. Piles for those of Europe, the Japanese would mount a little, while the Peguans, the Bramas, the Siamins, and the greater part of the Hindoos, must remain at nought, with respect to drawing, composition, expression, and coloring*.

Some circumstances have been necessarily suppressed here, concerning the manner of executing at Japan certain statues of *Xaca*; because it is necessary to throw aside details, in order to open a way; especially as something must be said of the Persians, Indians, and unfortunate Africans. With regard to Thibet, that interesting part of higher Asia, we shall not endeavour to remove the veil by which it is concealed; yet we may with certainty conclude that painters and sculptors have existed there. If the portraits of a king of that country, and of a grand *Lama*, found in Kircher's *China Illustrated*, are faithfully copied, they prove that the artists of *Lassa* are neither inferior nor superior to the other Asiatics. Although the people of Thibet are very ancient, and closely related with the Chinese, they do not on that account refrain from disputing several of their pretended inventions, and particularly that of gunpowder. Some pieces of gunnery brought into Europe by Tavernier, as great curiosities, prove that *Lassa* must have had manufactories of fire-arms directed by

* This scale, found at the end of his *Course of Painting*, has been somewhat improved in the *Memoirs of the Academy of Sciences* for the year 1755.

very good workmen, but their antiquity is not by any means attested. All that is known of the state of sculpture in that country does not extend beyond some statues of *Menippi*, a symbolical monster with nine heads: for the Chinese, and the Tartars, who should never be excluded from that race, have affixed more extravagant ideas to the number nine, than the Egyptians to that of seven. Many of the ceremonies, and political institutions of China, are analogous to the same species of puerile superstition; such as the division of the mandarines into nine classes, and a thousand other absurdities, of which the most melancholy is that of punishing or degrading the relations of a criminal to the ninth degree. Writers, who neither examined nor weighed any thing, have mistaken these follies for tokens of wisdom.

What the Persians relate on the subject of *Manes*, must be regarded as greatly exaggerated. He is the only painter of their country whose name is known in the West; and this would never have happened, had he not been at the same time chief of a sect. The legends of his disciples have preserved many facts concerning this singular man, some of whose paintings exist still at *Tebigil*, a town of Turkestan, or of Igout, unless, as we have too much reason to believe, that place was destroyed by fire in the last Tartar wars*. Could any of the original productions of

* We find the reason why *Manes* quitted Persia, in Hyde's *Treatise de Religione Persarum*.

Manes be discovered, they would certainly suffice to refute all that has been advanced by the Manicheans. If the Persians had found in their own country any good models of ancient masters, they must have continued to improve in an art concerning which they are almost totally ignorant. Yet they still practise painting, and, as they have softened the rigors of Mahometanism, their want of success cannot be ascribed to that religion. Their figured tapestry is said indeed to have been very celebrated in the days of Alexander, because it is mentioned by Theophrastus; but neither he, nor any other Greek, ever praised the design. The expressions employed by Martial, when speaking of the stuffs of Assyria, which resembled so much those of Persia, have reference to nothing more than the richness of the silk, the brilliancy of the colors, and the nature of the embroidery*. In Media, Babylonia, and Persia, this employment appertained entirely to the women, who embroidered much better than the men could paint; because they were restrained in some measure from hurrying over their work by the traces of the pattern they had to follow. Since the Asiatics began to execute their tapestries in the loom, instead of employing the needle, they are become inferior in quality; although it was never very difficult to surpass them; for, according to the testimony of the ancients, the Egyptians who employed the loom likewise wrought much

* *Non ego pretulerim Babylonica picta superbè*

Texta, Semiramidæ quæ variantur acu. Epig. 28. lib. viii.

better *. The Persians, however, had another species of embroidery on gauze, which the Egyptians could not imitate without the needle, as we learn from Lucan, where he employs three heroic verses to describe the superb veil of Cleopatra.

The Persian painters have always, to a certainty, made use of the same style as at present: superior to the Arabs and Indians in fancy-flowers, and mouk-work, they paint human figures very badly, and are almost incapable of drawing a full face. Thus they compose their subjects in a manner that only the profile, or one third of the visage, can be seen, even in those obscene representations for which they have a decided taste, as we frequently see by their carpets. With regard to perspective, they are exactly on a level with the Chinese, who have no notion whatever of the matter; and however the Maniseans may have lied in their legends, yet they never attributed any knowledge of the kind to their founder, whom they praise chiefly for his dexterity in drawing strait lines with the point of the pencil, unassisted by any instrument. We have now to add one fact sufficiently decisive: When the emperor of Persia, *Shad Abas* the second, wished to become a tolerable draughtsman, he could not find among the painters attached to his court, nor in all his country, any person capable of giving him instructions. It was therefore necessary to invite

* This verse of Martial is well known:—

*Hæc tibi Memphis tellus dat munera: vincta est
Pezæne Niliaco jam Babylonis acus.*

a Dutchman to Ispahan for this purpose; and Tavernier informs us, that he had met with this man, whose name was *Angel*, somewhere in the neighbourhood of Chiras*.

The Persians, however, lay claim to several discoveries in painting; and as they dispute the invention of the plaister of porcelain, with the Chinese and Japanese, they pretend likewise to have first introduced the substance employed to color the vases: yet they do not seem to have brought that operation to so great perfection as their opponents. Whatever may be the sentiments of the Indians on this point, they certainly make porcelain tolerably well, and perhaps without entering into any disputes about the matter. The impenetrable obscurity prevalent in the history of the arts of Asia, enables all the nations there to arrogate whatever discoveries they pleased; because no monuments exist to determine either dates or facts. Yet it is very remarkable, that the countries where porcelain has been brought to the greatest perfection have been ignorant of the method of making glass, until the middle of the last, or the beginning of the present century. Under the reign of *Can-bi*, a monk first erected a glass-house at Pe-kin; and the Persians were instructed in that art by an Italian, established at Chiras. The list of merchandize sent by the Romans into India proves, that although native crystal was found in that country, it was then totally destitute of glass.

* Journey into Persia, vol. i.

Of all the discoveries claimed by the Persians, *that* of mosaic appears to be best founded, in the opinion of Mr. Furietti *; because he saw what every person must have noticed, that mention is made of a pavement of colored stones in the Book of Esther. But he should have remarked, that the Arabian authors likewise speak of such works, some of which, they say, were incrusted with pieces of glass. Thus it appears that the Persians possessed that art in common with other Eastern nations; and the Egyptians were probably of the number †. Mr. Michaelis does not even exclude the Jews, in his treatise entitled the *History of Glass among the Hebrews*; although it is impossible to produce even the smallest appearance that any manufactories of glass-ware existed anciently in Judea; for the manufactures of Tyre and Sidon must not be attributed to that country. It cannot however be denied, that those colored pavements were really mosaic work, an invention brought into repute in proportion only as the art of painting declines. Without speaking of what is practised in Italy at the present day, it is certain that workmen in mosaic were never more encouraged than under Theodosius and Valentinian, when not one good

* De Musivis, capite primo.

† Lucan expresses himself thus in describing the luxury of Cleopatra:—

—*totaque effusus in aula*

Calcabatur onyx.

This cannot be understood otherwise than as a pavement in the Persian taste.

painter could be found in the Roman empire, that is to say in the whole world. Things have returned nearly to the same point; and, as in those days, the substance is now abandoned for the shadow.

Although the Persians are indebted to the Indians for the art of painting cotton, and of printing with moulds, yet they pretend to have surpassed greatly, their masters. The *kalincards* of Persia are believed, in Europe to be superior to the most beautiful *tapisseries* of Paliacate and Visapour, or the finest *cbites* of Masulipatam and Amadebath: but this is only true with regard to the drawing, and not in point of coloring, as Mr. Chardin confesses; yet he was greatly prejudiced in favor of the Persians, *who, according to him, were the best sculptors in the world, previous to the introduction of Mahometanism* *. If this traveller be blameable, for having proposed an opinion so extremely opposite to truth, he is no less so for endeavouring to justify the custom of the emperors of Persia, in carrying on manufactures at their own expense. This is one of the most pernicious institutions, ever invented by despots, or practised by tyrants; and therefore it shall be more amply discussed in the sequel. The Abbé de Guasco has fallen into the contrary extreme with Chardin, when he assures us, that of all Asiatic monuments, those of the Persians merit the least attention †. This judgment seems to have been founded on what was ad-

* Journey into Persia, vol. iii.

† Use of Statues among the Ancients.

As the laws can have no confidence in such men, they should be deprived of all dangerous instruments. Ancient Egypt is the only country in the world where a good police was exercised respecting the Jews; for that of the Romans, in this point, was very bad in the time of Augustus, and still worse under the succeeding emperors.

Those who never perceived any other obstacle than Mahometanism to the progress of painting in Asia, have been greatly deceived. The establishment of that religion has in reality produced no other change among the Indians, than that they refrain from representing animals on some painted stuffs; otherwise the more zealous Mahometans would cease to purchase them. With regard to the Mogul emperors, they never made any scruple of having painters at their courts; and some of their productions were brought into Europe by Mr. Manouchi, but through negligence they have never been engraved. Besides, these princes, although Mahometans, do not desist from impressing figures on their current coin*; and they never entertained an idea of preventing the circulation of those Indian pieces called *old pagodas*, which are as rudely drawn, and as barbarous in their type, as the money of Acham and Macassar. Finally, the Moguls never prevent the Indians from making pictures and statues to ornament their temples; and

* The Abbé Barthelemi, in his *Dissertations on the Medals of the Arabs*, mentions some other Mahometan princes, who had engraved images on their money copied after the Greek or Roman medals. But this practice is now totally abolished.

those

mine, in this point, the influence of climate and political institutions; for the little progress made there in the fine arts has been attributed entirely to religion. By the confession of both Turks and Arabs, it is evident that Mahomet could neither write nor read. Thus he did not imbibe the aversion he always testified for representations of living creatures from having perused, as some believe, certain compositions of the Ignicoles*; but it proceeded from a corruption of Judaism, which constantly received an increase of superstitions, as a stream is swelled in its course. The learned agree that, previous to the time of the Maccabees, the Jews never discovered much horror for images, nor even for the symbolical figures placed in the temple of Jerusalem by artists who came from Tyre. Although Origen, in his work against Celsus, affirms that the barbarous inhabitants of Judea had not in his time one single painter or sculptor amongst them, it does not follow that they had likewise renounced engraving on precious stones, signets, and coins. Since their departure from Egypt, until the present moment, the Hebrews have constantly applied themselves to that art; yet not one of them ever attained any great degree of excellence. Is it an error to believe that the temptation of falsifying money has inspired them with so much inclination for this species of engraving, which they are allowed to practise publicly in Europe, contrary to all ideas of sound policy?

* In the Arabic text of the Koran, the prohibition of making images is less clearly expressed than we are generally taught to believe.

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those edifices are filled almost entirely with such ill-made images. Many symbolical figures are likewise seen there, frequently in the attitude of baboons, like the statues of *Sommona-Kodom* at Siam, and sometimes in positions altogether unnatural; for the legs and arms are extended in a manner impracticable by the human body. It seems probable that the sculptors of that country, through ignorance of the laws of gravitation, have exaggerated the postures of their fakirs, who resemble satyrs, by placing their hands on the ground, and lifting up their feet in such a manner that the heels rest on the elbows, and in this situation call out, O but God is powerful! O but he is majestic!

Although the Indians have always distinguished themselves by their attachment to polycephalous statues, or such as have several heads, and supernumerary members, even to seven or eight pair of arms on one body; it is not less true that the same shocking corruption of taste infected likewise the greater part of the Eastern nations. Even the Greeks have not been totally exempt; for, besides their statues with two and three faces, it is certain that the wings they were so fond of placing on others betray a secret inclination for such extravagancies. Had the climate of Greece been six or seven degrees warmer, many artists there would have degenerated into the Oriental style; and it has been observed that, in Ionia, wings were already placed on certain statues, which had not received them in Peloponnesus.

Some

Some travellers have believed that the mode, so long practised by the Indians, of having painted and embroidered robes for their idols, has prevented them from employing much art in sculpture. This custom however is not universal. If some statues in the pagodas of *Matoura*, *Benares*, and *Jagrenat*, are clothed, others are found naked at *Tyronameley* in the Carnatic, although they exhibit neither more grace nor life than those covered with stuffs*.

Works of sculpture, apparently very ancient, have been dug up in different places of the East Indies, and of the south of Asia, such as the remains of the pagoda of *Elora*, the old statues of the coast of *Decan*, of *Canarin*, in the isle *Salsette*, and in *Elephanta*, another island off Bombay, where a subterraneous temple was seen by Ovington in one thousand six hundred and ninety, and by Grose, towards the year one thousand seven hundred and fifty-two†; but neither of them had sufficient knowledge of the arts and of literature, to produce an exact description. We only know that the architecture does not resemble any of the three Grecian orders; and its participating of the Eastern style is a sufficient refutation of the opinion that it had been erected by Macedonian colonies established there by Alexander. It was perhaps in these grottoes of *Elephanta*, that the Brachmans preserved that idol so mysterious, mentioned by Porphyry, which was seen by the Syrian Bardesanes.

* General History of Travels, vol. xiii.

† Grose's Voyage.

With

With regard to the bas-reliefs in metal, seen by Apollonius at the court of an Indian king, nothing of the kind is now known in that country. This leads to suppose that such works never existed, but that they had been invented by Philostratus, as well as the fabrics of Egyptian architecture in India, of which likewise no traces can be found. This Greek, in writing his romance, took delight in furnishing the palaces of some Asiatic sovereigns, without perceiving that his ornaments were frequently contrary to the taste of the country. These strange bas-reliefs must have resembled greatly the *pictures of Philostratus*, which were destitute of disposition; and the complication of subjects is such, that the most able painter could not possibly execute them, even by sacrificing, like the ancients, every thing belonging to perspective.

The productions of the modern Indians, compared with ancient monuments of undoubted authenticity, prove that, among them, the arts have remained invariably at the same point, since time immemorial. If they are not improved, they cannot be said to have degenerated; and this has been attributed by some authors to the division of the people there into tribes, some of which, it is well known, are composed of artists who have not permission to enter into the class of Bramins or any other. All these political institutions are supposed to have rendered the Indians inferior even to the Chinese; but the superiority of the latter is far from appearing decided; and admitting

it to be really so, the degree, we must allow, is almost imperceptible.

The paintings in the Indian pagodas, of which some copies have been given by Mr. Holwell, are certainly ridiculous, fantastical, and very badly executed *: but those of the Chinese pagodas are nothing better; and the painters of Surat do not yield to the ablest *Hoa-pei* of Nankin, particularly in what is called so improperly their works in miniature.

It is generally said, that from the banks of the Euphrates to the very extremities of Asia, the painters use no other than water-colors, and have scarcely any idea of a trefle; because they work on tables, and apply their colors equally, as is practised in *Guachi*; yet some of the procedures of the Indians leave room to suspect that they have had some knowledge of oil-painting, of which, according to Chardin and Maillet, the modern Persians and Egyptians are not ignorant. As we have little certainty that this method has been borrowed by them from the Europeans, the discovery of oil-painting seems more problematical than many authors imagine. One obvious reason presents itself why the Eastern nations would never practise generally that method: in the first place, their climate is beyond comparison dryer than ours; and secondly, they delight in brilliant colors, which are little affected by water, while oil tarnishes them considerably. Upon the whole it appears certain,

* They are inserted after his Mythology of the Gentoos.

that

that the artists of those countries have known, in very remote times, certain practices considered by us as new inventions. Our travellers frequently want time, and perhaps still more, capacity to describe different operations of the Asiatic manufactures. The observations scattered in the *Edifying Letters*, and some particular relations, are far from forming a complete chain of the principles adopted by the Indians in painting their stuffs, properly called *kallenzards* *, as well as those executed with moulds, which have led to printing books, according to the manner practised in China, Japan, and, probably, likewise in Hindostan. We do not even know what pencils are employed by the Indians; for the caustic liquors burn in an instant those made with hair; and nothing better has hitherto been imagined in Europe than splits of soft wood, which are indeed very imperfect instruments.

From India, all through western Asia, the Mahometan painters work at nothing but arabesks, or particular kinds of spotted grounds, seen on the walls of some mosques. The pictures in oil, and on canvas, brought from the Levant, are made by wretched Armenians, who have no notion whatever of design; and their compositions are altogether without taste. If they have served as models for engraving a collection of Turkish dresses and Greek modes, it was only that our artists might have some idea of their dresses,

* This word denotes the patterns done entirely with the pencil.

which these bunglers frequently change by clothing them ridiculously.

It is very surprising to hear Lord Baltimore, in his travels of one thousand seven hundred and sixty-three, informing us seriously that *Constantinople is not the place to look for pictures* *. None are to be found even as far as Barbary; for the principal palaces of Fez, Morocco, and Mequinez, afford nothing more in that line than some walls and ceilings, where gilding is employed on a blue ground, to represent stars and crescents †. Numberless inscriptions are likewise seen there, with all those interlacings and flourishes, of which the Arabic characters are so susceptible; for those who cannot paint must have recourse to writing, otherwise their works would say nothing. It may be allowable to observe on this occasion, that nothing but prejudice in favor of the ancients could have induced modern writers to apologize for Polygnotus, who is known to have written on his two great pictures at Delphi the names of all the personages ‡, exactly as the names of animals are seen in capital letters on the mosaic of Palestrina. The researches made at *Herculaneum* have produced monuments of the same nature, sufficient to prove that the paintings of Polygnotus trespassed against all the rules of per-

* Voyage in the Levant.

† Mouette, in his History of the Conquests of Mouli-Archy, known by the name of the King of Tafilet, exaggerates greatly the ornaments in the palace of the emperors of Morocco.

‡ Pausanias in Phocid. lib. x.

spective,

spective, were we not assured of this by the description of Pausanias.

If some Greek artists, born at Cyrene and Alexandria, are excepted, Africa cannot boast of having produced any great painters, not even among the Carthaginians in the most flourishing days of the republic. The Moors, who invaded Spain, cultivated no other painting than that which still preserves the name of *mauresk*; and it appears to have been under their pencil a species of decoration altogether absurd. Some indeed pretend, that they painted animals likewise in the same style with those found in the ruins of *Cintra*: but even supposing that these ornaments were not deposited there in later times, they certainly denote neither great taste nor any real knowledge of art. After examining attentively all the fragments of the numerous palaces and other edifices erected by these conquerors, no traces can be indicated of any remarkable talents in their painters, who were besides cramped in their pursuits by Mahometanism. What has been said of manufactories of painted stuffs, established by them in Spain, seems to have originated in the preference given by the Moors at all times for clothes of that quality. Such articles however were all brought from Egypt, where they were colored by a chemical preparation, already noticed in the beginning of this Section*.

The Coptes, at this day, are ignorant of even the names of the arts and sciences cultivated by their ancestors. Superstition in the first place made them

* *Pisti tunica, Nilotide Mauri.*

which these bunglers frequently change by clothing them ridiculously.

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Loubera, no person at Siam wishes to excel in his profession; because he would be obliged in that case to work six years for the court*.

None of the travellers in Asia have entered into so many details as Chardin; and he speaks very fully of thirty-two work-shops belonging to the emperors of Persia†, which cost those princes five millions annually; but we may suppose that they gained twice the sum of their expenditure. Seventy-two painters were maintained there, who, like all the other artists, had to follow the court in its journeys, as servants or slaves wait on their masters.

It appears that about the year one thousand six hundred and seventy-nine, the period of which we are speaking, some alterations were made in those work-shops. The makers of tapestry, instead of receiving money, had been paid in lands, or the produce of the earth; but they were not less dependant on the prince, and they wrought for him alone.

Common sense alone is sufficient to point out the injustice and impolicy of institutions so opposite to the prosperity of the arts, and to all notions of good government, which require that manufactures should always remain with the public, and never in the hands of the sovereign; for they are the property of all, and cannot justly be restrained to favor the interests of any person. What idea can be formed of countries where subjects are not only deprived of the right of possessing lands, and of political liberty, but

* Relations concerning the Kingdom of Siam, vol. i.

† Travels in Persia, vol. ii.

find that, from the union of these two causes, such obstacles are raised as can never be surmounted by all the efforts of the human mind.

The temperate countries of the ancient continent contain some nations almost in a savage state; and it is difficult to judge how far they may succeed in the arts, whenever they aspire at becoming polished. Apelles did not, in all probability, ever suppose that greater artists than himself would one day appear in marshes, frequently covered with snow, and inhabited by a small horde of the Scythian race, allied to the powerful tribe of the Theutons. This, however, is very different from the case of the nations in southern Asia: they have applied themselves to the arts long enough to admit of some judgment of what mankind can attain in such a climate, and under a government like theirs.

All the princes of Asia, without excepting the emperors of China, practised from time immemorial the pernicious custom of having manufactories and work-shops at their court, where every kind of furniture belonging to the palace was executed. We may well suppose that the articles employed there are so various, that scarcely any trade remains excluded. The origin of this custom has never been explained; but some light will be thrown on it by what we are about to observe.

When an artist discovers any happy disposition, he becomes immediately workman of the palace, either voluntarily, or by force. On this account, says

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† Travels in Persia, vol. ii.

also of the very fruits of their industry? Yet as the workmen at the court of Persia were paid regularly, even when sick, that circumstance blinded Mr. Chardin so far as to make him believe such establishments worthy of commendation. He did not perceive that the artists, treated in that manner, are vile slaves, to whom the *Nadir*, whenever instigated by caprice, can order stripes in the same manner that they are inflicted in the manufactories of the great Mogul, in those of the Chinese, and of the wretched kings of Siam. If the sovereigns of Asia could have invented any means of avoiding to pay and maintain those employed in their work-shops, they would soon have put them in execution. Incapable of finding any resource in that way, they consent to provide for their slaves; and thus, what astonished Mr. Chardin was not at all surprising.

In tracing the origin of these institutions, it was discovered to me in the Justinian code, where nothing of the kind could have been expected. The laws, contained there, are certainly very conformable to the ideas of the Asiatic despots, when they first established work-shops at their different courts; but in examining these matters we must begin a little higher.

The emperors of Constantinople, after having prohibited their subjects from wearing robes of purple, considered this law of such importance, that they endeavoured to remove even the possibility of its being transgressed. It was declared unlawful to dye any stuffs in that color; and to procure them, no other method was left than that of employing artists in the palace.

palace. Imperial dyers were therefore established, and makers of ink for signing diplomas, patents, and edicts; for it was likewise of a peculiar color, and we still possess the law enacted to prevent its being made or employed by private persons. The anxiety and weakness of those princes augmented, in proportion to their tyranny, until they thought fit, for their greater security, to have all the imperial ornaments fabricated in the palace of Constantinople. As they required the combined talents of many workmen, not only dyers were established at the court, but likewise goldsmiths, jewellers, weavers, shoemakers, embroiderers, belt-makers, saddlers, farriers, and a kind of people who passed themselves for engravers on precious stones.

The original expressions of the law of the emperor Justin, to which we allude, are to this effect:—
 “ Whatever concerns the marks of sovereign authority, ought not to be wrought indistinctly in shops, and private houses; but must be made by the workmen of the palace, in the interior of the court*.”

The suspicions of this prince, on the manner that this law might be eluded, are as remarkable as the law itself. Those persons, says he, who shall cause imperial ornaments to be made, under pretext of offering them to me as presents, shall be punished

* *Nulli prorsus liceat, lib. xi. Ornamenta enim regia intra aulam meam fieri à palatinis artificibus debent; non passim in privatis domibus aut officinis parari.*—The reader is requested to consult also the laws found in the title de Murilegulis, and in that of de Vestibus Holoberis.

with death. That clause was necessarily inserted, otherwise it would have been difficult to prove any person culpable.

In these dreadful effects of despotism, we observe how the prince, distrustful in the extreme, endeavours to have himself surrounded by a great void, in rendering the court independent of the state. Wishing to be independent of every person, he relies on his domestic slaves, who cannot have emulation, and whose industry is of course very confined. Without affirming that the decay of genius at Constantinople proceeded entirely from such odious and tyrannical laws, we are justified in believing that they contributed greatly to the total ruin of the arts. Thus, about the period we speak of, things had attained such a degree of excess, that not one engraver could be found in the whole empire; as appears from the money, which is only scratched, and all the characteristics of the grossest barbarism are seen there. The pretended legislator, Justinian, could not write his own name; and those who engraved his medals were little more learned than himself. It is absurd to hear the Goths accused of having first destroyed the taste of fine architecture. The two Isidores, and Arthemius, who made this prince superintend the building of Saint Sophia, were certainly not Goths; and yet we know how grossly they violated all the rules of art.

The motive of the laws we have mentioned discovers itself in absolute power, the disorder of government, the imbecility of the sovereign, and the corruption

ruption of the court. Each moment some revolt was dreaded, and fear suggested that the first rebel who appeared in public, with purple robes and a diadem, might be acknowledged as emperor. This apprehension dictated the edicts by which the dying purple stuffs beyond the precincts of the palace was declared to be the highest act of treason ever since the reign of Honorius. Nothing but the greatest weakness could have led to imagine such expedients to prevent usurpers; for when strong enough to be dangerous, they know either how to dispense with the insignia of power, or to create them if necessary. Yet it is right to observe, that in countries where slavery has long been established, mankind are wonderfully struck with those colors and decorations which constitute the prince. In China, the emperor would be nothing without his yellow robe.

After all these details on the origin of the manufactures established at the courts of the Asiatic monarchs, we have now to consider more particularly the fatal consequences of arbitrary power. Under such a government, the people are always so exceedingly poor, that artisans have not the means of purchasing the necessary machines and instruments. All travellers visiting Asia, have been astonished to see not more than five or six tools required for works which would employ five hundred in Europe*. This does not proceed from idleness, or want of industry, as we might be tempted at first to believe, but really

* Le Comte's New Memoirs on China, vol. i.

from excessive indigence. Every thing that passes through their hands displays this deficiency of instruments; and the workmanship is as bad as possible on all the gold and silver vessels, which are indeed not many, in Turkey, Persia, Mogul, and China. Thus all the arts requiring, like watch-making, a great number of machines, and tools, are never cultivated in those countries, not even in the work-shops of the princes, whose luxury is directed to other objects. One thing, resulting from this, could never have been believed, were our information concerning it less exact. The trades exercised in established fabrics throughout Europe, are carried on in the despotic states of Asia by travelling artisans. Goldsmiths are seen there, who ask for employment at every door: they work in private houses, and place themselves in an instant; for they carry all their tools about with them, and these, as we have already observed, are few. The streets of the Chinese towns would not be so much crowded, if the people possessed regular work-shops, instead of being under the necessity of running continually from one quarter of the town to another. Blacksmiths are seen on the same day in ten different places, where they have the inconvenience of transporting always their anvils and bellows*. No great penetration is requisite to perceive, that excessive poverty drives all these wretched people to a wandering life, little better than beggary. The erroneous opinions long entertained relative to the

* Salmon's Present State of China, vol. ii.

learned in China, who were said to honor mechanics, while in reality they despised them, are now altogether exploded; but the ridiculous prejudice still remains of believing that the Turkish emperors must necessarily learn a trade, according to the fundamental laws of the state. The pretended industry of these princes is confined entirely to cutting tooth-picks, or such trifling things, with a knife; and we have only to read one passage in *Ælian* with attention, to be convinced that the ancient Persian emperors were employed in the same manner *. Thus, what has been taken for a trade is no such thing; and the supposed particular law of the Turks, is nothing more than an immemorial custom in all the despotic courts of Asia, where the princes are as weak as children, and must be amused with play-things. We have seen some remonstrances made by a mufti to the sultan Mahomet the fourth, who disliked all manual occupations, and there he speaks of nothing but the danger of idleness. When the Chevalier d'Arvieux was introduced to one of the greatest princes of Arabia, he found him employed, like the Persian emperor mentioned by *Ælian*, in cutting a stick with his knife; and it would be insulting mankind to maintain seriously that this miserable Arab exercised a trade.

* *Persarum rex iter faciens, ne tadium obreperet ex tempore, phyllirium gestare solebat, & quo id scinderet, cultellum; atque huic operi regia manus dedita fuerunt. Prorsus enim neque libellum, neque cogitationes vel ad necessarium aliquid, dignumque scitu legendum, vel ad magnum aliquid & memorabile consultandum versavit.* Hist. Divers. lib. xiv.

On considering the nature of Asiatic luxury, it appears clearly to be a necessary effect of despotism; and a rule might be established on that point, the application of which would be very just in Europe. Luxury increases in proportion as slavery augments, until arrived at a certain point, when it begins to change into a vain and gross ostentation. All works of taste, and master-pieces of the arts, are then excluded. We have heard of those precious housings used to cover the elephants of the emperor of China, and of those vests, valued at two lacks of rupees, with which the Mogul emperors sometimes clothe the Omrahs: The troughs where the horses of the Persian emperors drink, are said to be of gold, and their table-plate has been estimated at thirteen hundred thousand pounds: but who ever spoke of the pictures or statues of the emperors of China, Mogul, and Persia?

Men equally despicable, without any personal merit, who have never done any thing to acquire virtue, and to whom heaven has denied genius, have no other means of being distinguished from each other than by the color or richness of their robes, and by every thing that strikes the eyes alone of the vilest populace. Luxury, then, changes not only its nature, but even its very name. To conceive how this revolution is operated, and what is the intermediate point of the two extremes, it is sufficient to select an example in the history of any celebrated people, and mark the different epochs with some precision.

It

It was only immediately after the conquest of Egypt, that the Romans discovered great luxury;* ; it continued augmenting until the reign of Commodus, when it became pomp, and degenerated finally, under Constantine, into a barbarous and Asiatic ostentation. From the first of these epochs, to the very last, liberty was evidently diminishing, and the arts declined likewise.

By consulting all the monuments of antiquity, still extant, relative to the Eastern despotic states, it will appear that formerly, as at this day, the most precious and extravagantly rich stuffs were wrought. Gold brocades, says Chardin, are seen in Persia, so very magnificent, that each yard is valued at one hundred and thirty-five pounds sterling; and yet not one piece of furniture is seen with any signs of either taste or elegance. As intrinsic value is more esteemed in those countries than the execution, it follows that the great artists, if any such were found there, would die with hunger. Luxury, degenerated into ostentation, has no occasion for any other than mere workmen; a blacksmith could have made the money of Constantine, his diadem, sceptre, and the harness of his horse. It is true that the type of the medals of the emperor Julian is nothing better, either in point of drawing or engraving; but he died too soon, or lived too late, to repair all the evils of despotism.

* *Explicuitque suos magno Cleopatra tumultu,
Nondum translato Romana in secula luxus.*

It has been a thousand times asserted, that none but freemen can succeed in the fine arts; but the reason is neither so well known, nor so easy to find, as people imagine; and the more the effect becomes evident, the difficulty increases of divining the cause. In an object of such importance, it is necessary to employ something more than words void of sense, or bombastic phrases without meaning. The Russians have made freemen of those whom the court of Petersburg sent into Italy to study drawing, and the principles of painting. As, by this, they have neither changed the organs nor physical constitution of these pupils, it is asked, if by the mere act of declaring them free, their progress can be more certain than if they had remained in a state of slavery. Yes, it may be answered, provided they contained in themselves the bud of genius, which has not been given to them with their liberty.

The true mode of solving the problem, appears to consist in dividing hereditary slaves into two classes. Some never reflect on their misfortune; others dwell on it continually. In the first case, they are evidently destitute of penetration, with few more sentiments than negroes, or domestic animals; and those who attempt to instruct such men are sure to lose their pains. In the second instance we find slaves, who, sensible of that blessing of which they are deprived either by fatality or injustice, must be continually occupied with ideas of their deprivation. This melancholy thought absorbs all others so entirely, that they cannot pay that constant attention requisite for the

the study of the arts; to which, in order to succeed, a man must not only consecrate his whole time, but be inaccessible to cares and anxieties. The mind, if we may use the expression, cannot support two burdens at once; and of all loads, slavery is without doubt the most irksome to those who are capable of reflection. They might become philosophers, like Epictetus, and embrace that rigid virtue which alone can console man for the loss of liberty, sooner than make any progress as painters, or poets, whose fancy should be divine, and their style strong and melodious. Very good effects have sometimes been produced by giving freedom to slaves of that kind, as we learn from several examples recorded in history. But, by the greatest of imaginable misfortunes, it is impossible, in the despotic states of the East, to confer liberty, as among the Greeks and Romans; for although a wretch may be relieved there from the chains of domestic servitude, he remains for ever in civil bondage. It is melancholy, after all these evident facts, that philosophers should now be alarmed by the reiterated efforts of arbitrary power to establish itself in Europe. Three centuries, or less, are supposed sufficient to reduce this part of the globe to a similar state with Asia. We must allow indeed that the change would be more rapid here than in Asia Minor, where mankind had fewer real wants, and therefore could be deprived of much without being reduced to perish with hunger: but this however was their fate at last. When the Greek emperors of Constantinople, notoriously infamous for their crimes, caused

a tax to be put on the very air, *pro haustu aëris*, the number of those who breathed in Ionia was already very small, and the financiers who took back that farmed impost, no longer gained as much as under the emperor Constantine. The history of the revenues of the lower empire would be exceedingly interesting; but no honest man could possibly peruse it without shedding tears,

With regard to the influences of climate on the fine arts, we shall endeavour to indicate them with precision, without repeating what has been already said in the introductory part of this article respecting the Oriental style.

In warm countries mankind do not possess sufficient force of mind to govern the imagination; and being always carried away by their vivacity, they are incapable of fixing their eyes long enough on any model to seize the contour. The painters there, in general, seem to have the same defect with the scholars of Europe, who employ only two or three tones between the shade and the light; while the great masters, whose fancy is more steady, are much longer in attaining the same point; because they endeavour to render the transitions from one tint to another imperceptible.

Of all the effects produced on the human frame by the continual ardor of the air, the most remarkable is hitherto very little known. The men of temperate countries sleep more than those of scorching climates, but less than the inhabitants of the boreal regions, where the vital heat is concentrated round the heart. The ancients pretended to have found
some

some nations between the tropics, whose slumbers were never disturbed by dreams; but they would have been much less deceived in attributing that prodigy to the people of the frozen zone. Mr. Boerhaave has observed, that sleep probably diminishes, in all hot-blooded animals, in proportion as the weakness of the stomach augments: in very warm countries this effect is so notorious, that if nature had not provided many aromatic plants, which must be taken in great quantities, scarcely any person would be capable of performing digestion. From this it results, that the vital spirits of the native inhabitants of such countries are greatly exalted, because they enjoy little repose. What is called enthusiasm in our poets, is, in theirs, a violent extacy; the most extravagant expressions do not appear, in their eyes, sufficiently strong to paint what they fancy they see or feel; and thus the verses of Pindar seem grovelling prose, in comparison with their compositions. It struck me, long ago, that the monsters and chimeras produced continually by the pencils of the painters, and the chisels of the sculptors of the East, originated in the same source with the metaphors, allegories, and exaggerated figures of the Oriental poets. This disorder of the imagination leads them beyond the limits of common sense, without which, nothing that is not monstrous can be either said or conceived.

Very little examination would have been necessary to prove, that such versifiers as we speak of here compose those phrases where they seem to place most emphasis without much trouble. *In comparing the*

pompous verses of Corneille with the natural lines of Racine, no person could suppose, says Montesquieu, that Corneille composed easily and Racine with pain *. The reason of this is, that to follow nature requires time, because it is necessary to think much, and select afterwards, from a great number of reflections, those which are best: but when people depart from nature, and abandon themselves to a torrent of ideas, they proceed very rapidly. The art of composing well will always consist in giving an appearance of the greatest facility to works where uncommon pains have been bestowed in the composition. People of ordinary genius, however, must never hope to attain this point; for they are incapable of approaching any thing of the kind.

What has been observed, with regard to the immutability of modes and manners in the East, might, in a certain sense, be extended to the arts, and particularly to painting. As the action of climate has undergone little change from time immemorial, the painters have likewise preserved at all times the same ideas in composing their subjects, and equal vivacity in the execution. It is said, indeed, that the *Hoa-pei* of China should be excepted; because they are believed to have grown more negligent than ever, during the last sixty years. This opinion, however, is erroneous, for the Chinese have only changed the coloring substances, and the paste of the porcelaine. The workmanship continues to be precisely the same

* Fragment of an Essay on Taste.

as in one thousand six hundred and forty-four, except where some corrections have been made in such figures as were disagreeable to the Tartars.

Even supposing these people capable of calming their imagination, and improving their drawing, the singular construction of their optic organs would prevent them from ever excelling as painters. This disposition is the reason why they admire none but the most lively colors, and such extreme contrasts of tints as create antipathy, instead of that union indispensably required by the Europeans. The colors, called enemies, from being so offensive to our eyes, when placed near each other, are to them the most gratifying of all. Besides, as their painters have no idea of giving austerity to their too florid coloring, either in the shades or deepenings, and employing very few demi-tints, they cannot be said to paint, but merely to color drawings. The pictures of European masters, particularly those in oil, appear to them morbid, as if tinged with smoke; and the darkest pieces painted by Rembrandt, would certainly be frightful in their eyes.

Their inclination for glazing colors proceeds from the weakness of their eyes, which require strong impressions. It is believed that the more a country is dry and serene, the less favorable it should be considered for the sight; and in this point, indeed, humidity seems to be very advantageous. But independent of this general cause, the inhabitants of southern China, and a part of Japan, are very subject to a

disorder in the eyes, already noticed at length in speaking particularly of the Chinese and Egyptians. Certain very penetrating winds, blowing sometimes from the equinoctial line towards the tropic of Cancer, must be considered likewise as affecting all these people, who would probably be incapable of reading, for any continuance, either written or printed characters, equally small with those employed in Europe. They have the diaphragm of the eye-lids longer than ours, and some, like the Chinese, practise an artificial method of increasing this peculiarity. Painters, there, scarcely ever render the whole of the iris visible in their pictures; the sculptors of Siam cut the eyes in a rhomboidal form, and the Indians represent them in a strange manner, difficult to be defined. Neither indeed do we find any ancient statues of the Egyptians which discover any beauties in this point. The whimsical opinion entertained by the mythologists concerning the Venus of Cythera, who was supposed to squint a little, appears to have proceeded from some representations of the *Nephtys* made in Egypt. Thus we find Persius employing the term *lusca sacerdos* to denote a priestess of that country.

As all the native and factitious colors of southern Asia are exceedingly beautiful and abundant, the painters there can easily gratify the taste of their nation, which never revolts at defective drawing, provided the coloring preserves all its brilliancy. But this is not the case in Europe, where these two parts must be equally perfect; and therefore painting de-
generated

generated in Italy, although the Romans spared no expence in procuring the most precious water-colors from the East-Indies, by the way of Egypt *.

Few motives induce the inhabitants of warm climates to leave their native country. Merchants travel there from thirst of gain, and pilgrims through fear of hell ; but those who are artists, or workmen, never go abroad for improvement, and they acquire little at home. What we call polite literature, the study of languages, history, antiquity, and sound criticism, are altogether unknown in southern Asia. This ignorance produces that rudeness of style and genius, which has been erroneously imputed to the custom of confining their women. The female sex enjoyed infinitely more liberty at Rome than at Athens ; and yet we know how much the Athenians were superior in the fine arts. The conversation of women was besides very far from softening the disposition of the Romans, who remained constantly addicted to frightful scenes of expiring gladiators, combats of wild beasts, and all the other atrocities exhibited on the Arena. Finally, experience proves that the taste and genius of a nation become much more corrupt, when too great liberty is granted to the fair sex, than when they are confined within reasonable

† *India conferente fluminum suorum limum & draconum & elephantorum sanie, nulla nobilis pictura est.* Plin. lib. xxxv. cap. vii.

—He took dragon's blood for an animal production ; and his error was exactly the contrary of that into which Pomet fell in his History of Drugs, where he supposes cochineal to be a vegetable substance.

bounds ; and therefore it will no longer be permitted to cite the example of the Egyptians, whose authority, besides, is null in whatever belongs to the fine arts.

We have now only one observation more to offer concerning China. From the prodigious extent of that country, and the variety of its climates, we should be led to suppose that the works executed at Pe-kin could not be very similar to those of Canton, and yet the difference is scarcely perceptible, because the inhabitants of the provinces constantly intermix in the capital. As neither posts, nor other conveyances for private letters, exist in any part of the empire, the majority of the merchants are nothing more than pedlars, who carry their wares continually from one place to another. The government, besides, is every-where the same ; and greater liberty is not granted to the artists of the north than to those of the southern provinces ; and from the superiority of the latter in population, they must naturally give the tone and fix the national taste. The merchants are not the only people who, for want of a regular correspondence, have to travel about like those of the rest of Asia ; for even the mandarines pass continually from one province to another ; and all contribute to the mixture we have mentioned. The magistrates are seldom allowed to remain in the places of their birth, for the same reason that the despotism of the government will not admit of the establishment of posts. The police of the country, in general, is therefore inferior to that of Europe : and the communication of
knowledge

knowledge beyond comparison more difficult. Thus the minds of the artists, having no excitement, either from uncommon objects or new ideas, preserve always the fold they at first contracted.

Such is the result of our inquiries concerning the state of painting and sculpture in the East. The other arts, known to the Egyptians and Chinese, shall be discussed in the two following Sections ; but the principal points of their religion and government must be reserved for the Third Part of the work. This arrangement has appeared best adapted to the introduction of some degree of order, among such an astonishing variety of subjects.

SECT. V.

STATE OF CHYMISTRY AMONG THE EGYPTIANS AND CHINESE.

IT is almost inconceivable, that some men should have had the weakness to write books, for the sole purpose of demonstrating that Egyptian mythology concealed nothing from our eyes but chymical secrets. An obscure monk, to the disgrace of the eighteenth century, has now published a compilation on that subject, which discovers as much ignorance of fable as of history. In comparison with his, the work of Tollius was a thousand times more supportable; and, instead of being imitated, the follies of that author should have been forgotten *. With regard to what is found in the pretended hermetic philosophy of the Egyptians, in Conring, Borrich, and a volume of the *Ædipes* of Kircher, we shall refrain from passing any judgment, in order to attach ourselves to things much more probable.

The Jews of Egypt, who had emigrated from Palestine under the first Lagidæ, had been almost entirely ruined in the reign of Cleopatra, who detested that colony of monopolizers and usurers: but the conquest of the Romans was still more fatal, by depriving them of the tolls on the Nile, and the ma-

* This work, so unjust to the memory of Tollius, is entitled, *Fortuita, in quibus præter Critica non nulla, tota fabularis Historia, Græca, Phænica, Ægyptiaca, ad Chymiam pertinere asseritur.*

ple of Tyre, which in his time was extremely dear. This gross and injudicious interpolation was supposed authentic by George Syncel, who inserted many such chimeras in his Chronography. Finally, the monks of St. Severus were perhaps acquainted likewise with what Suidas mentions of the emperor Dioclesian, who, he pretends, collected in Egypt all books relative to the philosopher's stone, and threw them into the flames to prevent sedition. This is equally true and reasonable with what the Coptes assert concerning the prodigious multitude of men massacred by the orders of that prince: their dead bodies, say they, covered a space of several square leagues, and produced a river of blood, as broad as the Nile at Monfot. Such is the extravagant genius of the men of the East, that they mix continually the most atrocious stories with the most ridiculous.

The person who wrote the life of Dioclesian, was not absurd enough to insert a single word concerning the pretended fate of the Hermetic books. This fable was in fact invented long after the death of that emperor, who had visited Egypt to punish some insurgents of *Coptus*, and the surrounding district. As that town could not be easily approached, Dioclesian resolved to demolish it entirely, and build another at some little distance, to which he gave the name of *Dioclesianopolis*. With regard to some other steps taken by him, to regulate the affairs of Thebais, they were all very wise, and have been admired even by Eutropius.

tics, disappeared, no person knows in what manner, and were first replaced by the anchorites, some of whom were really Christians. Numerous convents for monks, who lived in common, were afterwards established there, some of which still exist, while others are fallen entirely into ruins. Those men of exemplary piety began by collecting fabulous traditions, concerning the method practised by the ancient Egyptians, in changing the essence of metals; and they afterwards wrought night and day at such experiments. This fact has been acknowledged by their own bishops, one of whom, presiding at the town of *Siut*, or the ancient Lycopolis, towards the end of the last century, pointed out to the traveller Vansleb the ruins of an edifice, where three hundred and sixty monks were employed in looking for the philosopher's stone*. We must not however believe that they pursued their researches in the same manner as the adepts of Europe; for instead of employing either furnace or crucible, they had recourse in general to mysterious words, prayers, and ceremonies. In fact, they resembled the people vulgarly called magicians, more than those supposed to be alchemists.

The members of this monastery, dedicated to Saint Severus, might probably have known a passage introduced into the Chronicle of Eusebius by Pandorus, who fancied that, by means of alchymy, it was possible to compose a color equal in beauty to the pur-

* Journey into Egypt.

ple of Tyre, which in his time was extremely dear. This gross and injudicious interpolation was supposed authentic by George Syncel, who inserted many such chimeras in his Chronography. Finally, the monks of St. Severus were perhaps acquainted likewise with what Suidas mentions of the emperor Dioclesian, who, he pretends, collected in Egypt all books relative to the philosopher's stone, and threw them into the flames to prevent sedition. This is equally true and reasonable with what the Coptes assert concerning the prodigious multitude of men massacred by the orders of that prince: their dead bodies, say they, covered a space of several square leagues, and produced a river of blood, as broad as the Nile at Monfot. Such is the extravagant genius of the men of the East, that they mix continually the most atrocious stories with the most ridiculous.

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The Egyptian monks, with all their insatiable thirst of gold, and blind hatred towards the memory of Dioclesian, remained in an indigence almost without example. Had they even succeeded in amassing any wealth, the Arabs would soon have interfered; for those robbers are very expert at carrying away whatever they find in monasteries; and we may suppose, that their readiness to pillage houses of that kind is founded on the opinion of the riches they must one day contain, when the alchymists shall be more fortunate. It is certain, that the Arabs are still more infatuated than even the Coptes, with two ridiculous opinions: some believe that all the considerable ruins of the ancient Egyptian edifices contain treasures, guarded by spells, which may however be broken: and others, convinced that mercury is the only substance capable of transmutation, carry about constantly small boxes of that metal, that they may never be totally unprovided. In one thousand seven hundred and fourteen, the scheic Selim presented his provision to Paul Lucas, begging him to make some experiments*; although, in the place where they then were, it would have been impossible to find either furnace or coal. At one time the news circulated, that another scheic had discovered a very ancient manuscript, preserved by the greatest chance from the researches of the emperor Dioclesian, and containing all the secrets of chymistry. Those who

* Travels in Upper Egypt, vol. ii.

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Pfammeticus, towards the eighteenth degree of north latitude, on the banks of the Astaboras.

It is not necessary to indicate here, the different passages of the book which gave rise to the whimsical ideas entertained by the Egyptian Jews, concerning the ancient priests of that country, and particularly those called *Mecafchaphim* in Hebrew, and defined in Greek by a term something similar to our word Pharmacopolists, who appear to have belonged to the medicinal college. These Jewish allegorists were not ignorant that the Egyptians, who wrought in the glass-houses of the great Diospolis, and Alexandria, had certain procedures for counterfeiting jewels and murrine vases, which were sometimes far more costly than precious stones. Such secret operations alone sufficed to make visionaries suspect, that the priests of Egypt must have been deeply skilled in alchemy; and we may consider this as the real source of all the fables which accompanied the progress of the Arabs in the arts; for they either first laid the foundations of true chymistry, or, at least, revived that art, after it had been almost entirely forgotten.

The Egyptians excelled all ancient nations in manufacturing glass; and they assured Strabo, that their country produced a certain ingredient absolutely necessary to render that substance beautiful *. This, in my opinion, was nothing more than the kali, still purchased by the Venetians at Alexandria; and had it not been for the stupidity of the Turks, the glass-

* Geograph. lib. xvi.

works of Venice would never have enjoyed their great reputation. The kali we speak of here, should be considered as superior to all others; and every person knows that it is the ashes of a plant called by botanists *mesem bryanthemum Copticum*.

Thus we perceive, that in the days of Strabo the Egyptians were very far from admitting the glass-work of Tyre and Sidon to be so decidedly superior, merely, as it was said, from the qualities of the river *Belus*. Some modern authors indeed assert, that the Egyptians were incapable of casting mirrors, although that art was common among the Sidonians. We have, however, great reason to doubt that plate looking-glasses were known to the ancients; and the word *spicura*, found in Pliny, when speaking of the manufactures of Sidon*, seems to be a word used for *specularia*. It may therefore be supposed that this naturalist means nothing more than those small pieces of glass, very thick, and generally round, which were used for windows. Some of the same kind are still found in different parts of Turkey, and such a practice, although it seems to have been original, does not suppose any great capacity in the workmen. In this art the Egyptians might, without much difficulty, have surpassed the Tyrians and Sidonians, who arrogated many discoveries, to which they had no title.

The judgment must not only be weak, but the credulity very great, to adopt the fable of those mer-

* Hist. Nat. lib. xxxvi.

chants, who having kindled a fire on the Phenician shore, saw the sand enter into fusion, and found, in that manner, unexpectedly, the method of making glass. Mankind had made fires in the same way many thousands of years before the existence of town of Tyre; and in certain cases, even the ashes of wood, or dried herbs, are sufficient dissolvents. It was therefore superfluous to suppose, that these adventurers had the good fortune to find some alkali in their boat; and this circumstance has evidently been added afterwards, to support an incongruous fable. The concurrence of fortuitous causes has not been so powerful in all such inventions, as people generally imagine; and the procedures must have been developed one after the other. Chance seems indeed to have had little to do in the discovery of glass, which could only be a consequence of the art of pottery. Different compositions, resembling porcelain, were first employed; and some nations never got farther in this art; while others contented themselves with the use of a species of enamel. In America, so late as the year one thousand four hundred and ninety-two, no glass-ware had ever been produced; and yet some of the savages there knew how to enamel their earthen vessels. This we learn from Newborough, a judicious and enlightened man, who is mentioned with praise in our Philosophical Dissertations on the Americans.

Clay of the best kind is very rare in Ethiopia; and almost every substance dug from the earth contains sand. The vegetables produce more alkali than in
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other

other countries; and plants are used there for fuel, instead of wood, which is as scarce as in Egypt. Palm-trees indeed are abundant, but where people live on dates, such plantations are very precious. Thus, it is possible, that the people there, in burning their earthen pots, might have discovered, sooner than the inhabitants of other countries, all the different stages of vitrification. Ancient historians agree, almost unanimously, that glass was known to the Ethiopians; and if Herodotus had heard of the great pieces of mineral salt cut in Ethiopia for coffins, he would not have given the name of glass to a substance dissoluble in water. This Greek, although instinctively addicted to lying, was not weak enough to confound two things so very different in their nature.

The glass-house of the great Diospolis, the capital of the Thebais, seems to have been the most ancient regular fabric of that kind; and if the Tyrians could have adduced decisive monuments in their own favor, they would not be seen recurring to fables in support of their pretensions. The most remarkable of their productions, in this way, were certain columns, and a species of cippus, colored in a manner to resemble emerald: but many hundreds of curious compositions of different kinds were seen among the Egyptians. Without speaking here of their cups, almost as pure as crystal, or of those called *alaf-fontes*, supposed to have represented figures varying in color according to the points of view in which they were placed, something like what is commonly

called *pigeon's-neck*, we have only to remark, that they were well acquainted with the manner of chisseling and turning glass. In these procedures, the slightest inattention caused the destruction of what had cost so much pains; and when such vases even succeeded perfectly, they required to be used with so great delicacy, that those, who, like the poets in general, were addicted to voluptuousness, considered these fragile goblets as unfavorable to their parties of pleasure*.

The Egyptians were besides acquainted with the manner of gilding glass†, of which the Tyrians and Sidonians had no knowledge. But although only one step was necessary, in order to form tinned mirrors, they never used any other than such as were entirely of metal; and these seem to have been invariably portable. The rigorous criticism we profess obliges us to consider as fabulous all accounts of two prodigious mirrors, one of which was said to be placed on the tower of Pharos, and the other on the summit of the temple of Heliopolis, where it reflected the image of the sun through an opening of the roof, or terrace.

* *Tolle, puer, calices, tepidique torcumata Nili;
Et mihi securâ pocula trade manu.*

Martial, lib. xi. and xii.

This passage is explained by another in the twelfth book, as well as by the following lines:

*Non sumus audacis plebeia torcumata vitri:
Nostra nec ardenti gemma feritur aquâ.
Aspicias ingenium Nili, quibus addere plura
Dum cupit ab, quoties perdidit auctor opus.*

† Athenæus, lib. v.

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The ancients, indeed, had sometimes mirrors suspended in such a manner, that the effects they produced were considered as preternatural. Something of this nature was certainly erected in the temple of Smyrna; but Strabo has described that of Heliopolis, without saying one word of those rays which descended on the altar, while the spectators could not perceive the source of light. This pretended illusion therefore did not give rise to what is now practised in a church of the Christian Coptes, dedicated to saint Danicanus, where the monks, by means of two small windows, caused shadows to appear on the opposite wall. That edifice, situated near *Tekebi*, about twenty-seven leagues from the ancient Heliopolis, does not appear to have been built according to the true principles of optics, for the express purpose of deceiving the people; but if Vansleb, and Father Sicard, had been more versed in physics, they would have remarked that shadows could not produce any effect in any well-lighted place*; and therefore we may suppose, that the darkness had been increased, to favor an illusion nearly similar to what is produced by a camera obscura. This trick appears to have been somewhat less awkward than those practised by some Neapolitan impostors; but all attempts to deceive the people, in religious matters, are equally abominable in the eyes of philosophers.

My patience has been exercised not a little in reading what is written by an academist of Barce-

* Vansleb's Journal, and Memoirs of the Missions in the Levant, tom. ii.

As the laws can have no confidence in such men, they should be deprived of all dangerous instruments. Ancient Egypt is the only country in the world where a good police was exercised respecting the Jews; for that of the Romans, in this point, was very bad in the time of Augustus, and still worse under the succeeding emperors.

Those who never perceived any other obstacle than Mahometanism to the progress of painting in Asia, have been greatly deceived. The establishment of that religion has in reality produced no other change among the Indians, than that they refrain from representing animals on some painted stuffs; otherwise the more zealous Mahometans would cease to purchase them. With regard to the Mogul emperors, they never made any scruple of having painters at their courts; and some of their productions were brought into Europe by Mr. Manouchi, but through negligence they have never been engraved. Besides, these princes, although Mahometans, do not desist from impressing figures on their current coin*; and they never entertained an idea of preventing the circulation of those Indian pieces called *old pagodas*, which are as rudely drawn, and as barbarous in their type, as the money of Acham and Macassar. Finally, the Moguls never prevent the Indians from making pictures and statues to ornament their temples; and

* The Abbé Barthelemi, in his *Dissertations on the Medals of the Arabs*, mentions some other Mahometan princes, who had engraved images on their money copied after the Greek or Roman medals. But this practice is now totally abolished.

those

those edifices are filled almost entirely with such ill-made images. Many symbolical figures are likewise seen there, frequently in the attitude of baboons, like the statues of *Sommona-Kodom* at Siam, and sometimes in positions altogether unnatural; for the legs and arms are extended in a manner impracticable by the human body. It seems probable that the sculptors of that country, through ignorance of the laws of gravitation, have exaggerated the postures of their fakirs, who resemble satyrs, by placing their hands on the ground, and lifting up their feet in such a manner that the heels rest on the elbows, and in this situation call out, O but God is powerful! O but he is majestic!

Although the Indians have always distinguished themselves by their attachment to polycephalous statues, or such as have several heads, and supernumerary members, even to seven or eight pair of arms on one body; it is not less true that the same shocking corruption of taste infected likewise the greater part of the Eastern nations. Even the Greeks have not been totally exempt; for, besides their statues with two and three faces, it is certain that the wings they were so fond of placing on others betray a secret inclination for such extravagancies. Had the climate of Greece been six or seven degrees warmer, many artists there would have degenerated into the Oriental style; and it has been observed that, in Ionia, wings were already placed on certain statues, which had not received them in Peloponnesus.

Some

Abderrahman, who was on the spot, says that the emeralds are covered with a whitish incrustation, without any appearance whatever of lapis prasius; and the three different kinds found there are alike purified by means of warm oil.

Although the execution of statues in colored glass, practised by the Egyptians, required much expertness, yet to counterfeit the murrins, supposes still greater abilities. It is most astonishing, that, after all the researches made by the learned in Europe, nothing certain has been communicated to us concerning the substance employed in forming those famous vases. The price they bore was excessive, but not equal to what Father Hardouin has calculated; for it is well known that he mistook the sesterces for talents, and this was exactly like confounding shillings with guineas. Thus, according to his foolish perversion of the text of Pliny, and an estimate of the talent given by Count Caylus*, it results, that the murrin, broken by Petronius, must have cost fifty-six thousand two hundred and fifty pounds sterling. The Cornelian vase, representing the mysteries of Ceres, taken by a foldier at the siege of Mantua, has never been estimated at more than one hundred and fifty thousand German crowns: in fact, it never was worth the twentieth part of that sum, al-

emeralds, which they were forced to restore to the Ethiopians; and from this we may conclude that it had been their property long before the invasion.

* Memoirs of the Academy of Inscriptions, vol. xxiii.—This computation, which makes the talent amount to 180l., is far from being exact.

though

With regard to the bas-reliefs in metal, seen by Apollonius at the court of an Indian king, nothing of the kind is now known in that country. This leads to suppose that such works never existed, but that they had been invented by Philostratus, as well as the fabrics of Egyptian architecture in India, of which likewise no traces can be found. This Greek, in writing his romance, took delight in furnishing the palaces of some Asiatic sovereigns, without perceiving that his ornaments were frequently contrary to the taste of the country. These strange bas-reliefs must have resembled greatly the *pictures of Philostratus*, which were destitute of disposition; and the complication of subjects is such, that the most able painter could not possibly execute them, even by sacrificing, like the ancients, every thing belonging to perspective.

The productions of the modern Indians, compared with ancient monuments of undoubted authenticity, prove that, among them, the arts have remained invariably at the same point, since time immemorial. If they are not improved, they cannot be said to have degenerated; and this has been attributed by some authors to the division of the people there into tribes, some of which, it is well known, are composed of artists who have not permission to enter into the class of Bramins or any other. All these political institutions are supposed to have rendered the Indians inferior even to the Chinese; but the superiority of the latter is far from appearing decided; and admitting
it

it to be really so, the degree, we must allow, is almost imperceptible.

The paintings in the Indian pagodas, of which some copies have been given by Mr. Holwell, are certainly ridiculous, fantastical, and very badly executed*: but those of the Chinese pagodas are nothing better; and the painters of Surat do not yield to the ablest *Hoa-pei* of Nankin, particularly in what is called so improperly their works in miniature.

It is generally said, that from the banks of the Euphrates to the very extremities of Asia, the painters use no other than water-colors, and have scarcely any idea of a tressle; because they work on tables, and apply their colors equally, as is practised in *Guachi*; yet some of the procedures of the Indians leave room to suspect that they have had some knowledge of oil-painting, of which, according to Chardin and Maillet, the modern Persians and Egyptians are not ignorant. As we have little certainty that this method has been borrowed by them from the Europeans, the discovery of oil-painting seems more problematical than many authors imagine. One obvious reason presents itself why the Eastern nations would never practise generally that method: in the first place, their climate is beyond comparison dryer than ours; and secondly, they delight in brilliant colors, which are little affected by water, while oil tarnishes them considerably. Upon the whole it appears certain,

* They are inserted after his Mythology of the Gentoos.

that

that the artists of those countries have known, in very remote times, certain practices considered by us as new inventions. Our travellers frequently want time, and perhaps still more, capacity to describe different operations of the Asiatic manufactures. The observations scattered in the *Edifying Letters*, and some particular relations, are far from forming a complete chain of the principles adopted by the Indians in painting their stuffs, properly called *kallencards**, as well as those executed with moulds, which have led to printing books, according to the manner practised in China, Japan, and, probably, likewise in Hindoostan. We do not even know what pencils are employed by the Indians; for the caustic liquors burn in an instant those made with hair; and nothing better has hitherto been imagined in Europe than splits of soft wood, which are indeed very imperfect instruments.

From India, all through western Asia, the Mahometan painters work at nothing but arabesks, or particular kinds of spotted grounds, seen on the walls of some mosques. The pictures in oil, and on canvas, brought from the Levant, are made by wretched Armenians, who have no notion whatever of design; and their compositions are altogether without taste. If they have served as models for engraving a collection of Turkish dresses and Greek modes, it was only that our artists might have some idea of their dresses,

* This word denotes the patterns done entirely with the pencil.

which these bunglers frequently change by clothing them ridiculously.

It is very surprising to hear Lord Baltimore, in his travels of one thousand seven hundred and sixty-three, informing us seriously that *Constantinople is not the place to look for pictures* *. None are to be found even as far as Barbary; for the principal palaces of Fez, Morocco, and Mequinez, afford nothing more in that line than some walls and ceilings, where gilding is employed on a blue ground, to represent stars and crescents †. Numberless inscriptions are likewise seen there, with all those interlacings and flourishes, of which the Arabic characters are so susceptible; for those who cannot paint must have recourse to writing, otherwise their works would say nothing. It may be allowable to observe on this occasion, that nothing but prejudice in favor of the ancients could have induced modern writers to apologize for Polygnotus, who is known to have written on his two great pictures at Delphi the names of all the personages ‡, exactly as the names of animals are seen in capital letters on the mosaic of Palestrina. The researches made at *Herculaneum* have produced monuments of the same nature, sufficient to prove that the paintings of Polygnotus trespassed against all the rules of per-

* Voyage in the Levant.

† Mouette, in his History of the Conquests of Mouli-Archy, known by the name of the King of Tafilet, exaggerates greatly the ornaments in the palace of the emperors of Morocco.

‡ Pausanias in Phocid. lib. x.

spective,

spective, were we not assured of this by the description of Pausanias.

If some Greek artists, born at Cyrene and Alexandria, are excepted, Africa cannot boast of having produced any great painters, not even among the Carthaginians in the most flourishing days of the republic. The Moors, who invaded Spain, cultivated no other painting than that which still preserves the name of *mauresk*; and it appears to have been under their pencil a species of decoration altogether absurd. Some indeed pretend, that they painted animals likewise in the same style with those found in the ruins of *Cintra*: but even supposing that these ornaments were not deposited there in later times, they certainly denote neither great taste nor any real knowledge of art. After examining attentively all the fragments of the numerous palaces and other edifices erected by these conquerors, no traces can be indicated of any remarkable talents in their painters, who were besides cramped in their pursuits by Mahometanism. What has been said of manufactories of painted stuffs, established by them in Spain, seems to have originated in the preference given by the Moors at all times for clothes of that quality. Such articles however were all brought from Egypt, where they were colored by a chemical preparation, already noticed in the beginning of this Section *.

The Coptes, at this day, are ignorant of even the names of the arts and sciences cultivated by their ancestors, Superstition in the first place made them

* *Piñi tunica, Nilotide Mauri.*

renounce sculpture; and afterwards they fell into an ignorance equal to that of the Bedouin Arabs. Their monks, who might have studied in the monasteries, which the Mamalukes and Turks never thought of molesting, are now metamorphosed into brutes, and do not any longer make any researches even in chemistry. Finally, *the modern Egyptians*, says Mr. Maillet, *are bunglers in every thing: their painters are wretched daubers, whose colors, either in oil or in water, when exposed to the air, fade almost instantaneously. They gild still, but in a manner much inferior to that of the ancients; and painted decorations are more employed in the interior of private houses, where tapestry is not used, than in public edifices, which are all exceedingly simple* *. Yet the walls of some of their churches exhibit figures of saints as wretchedly drawn as those so often seen in some Gothic cathedrals, where, through negligence, they have not been effaced †.

It would be useless to proceed further into Africa; we shall therefore only observe that all the ancient monuments discovered in advancing towards the south, for more than two hundred leagues beyond the cataracts of the Nile, are sculptured in the Egyptian taste, and loaded with similar symbols; as appears particularly in the ruins of the royal city of *Axum*, situated near the fifteenth degree of north latitude ‡. Should
any

* Description of Egypt.

† Vansleb's Journal.

‡ We should perhaps except the monument said to have existed at *Adulis*; it appears however to be fabulous,—Diodorus Siculus knew

any precise notions ever be acquired of the excavations found in different parts of Ethiopia, the hieroglyphical characters there will probably be found to resemble exactly those of Thebais; for the Thebans and Ethiopians, although governed by different sovereigns, were fundamentally one people, and addicted to the same religion.

The adventurer Bermudas, calling himself improperly patriarch of Ethiopia, informs us, that the emperor of that country obliged the Portuguese to leave at his court a painter who accompanied them. We may therefore judge what must have been the state of things when applications were made to an artist of Portugal. That country, however celebrated for able inquisitors, has produced only one single painter; and his works are better known at Rome than at Lisbon, where pictures are less esteemed than bull-baiting, an amusement worthy of a nation not yet freed from barbarism.

If we except ancient Egypt, where the government was not strictly despotic, either in form or the principles of its constitution, all the other states mentioned in this chapter, were governed by arbitrary power, and the absolute will of a chief. Thus, previous to any decision on the influence of climate, it is necessary to examine that of despotism, and we shall

knew that the statues of Ethiopia resembled those of Egypt exactly. He explains himself on that point in very clear terms, as Bochart has already observed in *Phaleg*. lib. iv.

find that, from the union of these two causes, such obstacles are raised as can never be surmounted by all the efforts of the human mind.

The temperate countries of the ancient continent contain some nations almost in a savage state; and it is difficult to judge how far they may succeed in the arts, whenever they aspire at becoming polished. Apelles did not, in all probability, ever suppose that greater artists than himself would one day appear in marshes, frequently covered with snow, and inhabited by a small horde of the Scythian race, allied to the powerful tribe of the Theutons. This, however, is very different from the case of the nations in southern Asia: they have applied themselves to the arts long enough to admit of some judgment of what mankind can attain in such a climate, and under a government like theirs.

All the princes of Asia, without excepting the emperors of China, practised from time immemorial the pernicious custom of having manufactories and work-shops at their court, where every kind of furniture belonging to the palace was executed. We may well suppose that the articles employed there are so various, that scarcely any trade remains excluded. The origin of this custom has never been explained; but some light will be thrown on it by what we are about to observe.

When an artist discovers any happy disposition, he becomes immediately workman of the palace, either voluntarily, or by force. On this account, says

Loubera,

Loubera, no person at Siam wishes to excel in his profession; because he would be obliged in that case to work six years for the court*.

None of the travellers in Asia have entered into so many details as Chardin; and he speaks very fully of thirty-two work-shops belonging to the emperors of Persia†, which cost those princes five millions annually; but we may suppose that they gained twice the sum of their expenditure. Seventy-two painters were maintained there, who, like all the other artists, had to follow the court in its journeys, as servants or slaves wait on their masters.

It appears that about the year one thousand six hundred and seventy-nine, the period of which we are speaking, some alterations were made in those work-shops. The makers of tapestry, instead of receiving money, had been paid in lands, or the produce of the earth; but they were not less dependant on the prince, and they wrought for him alone.

Common sense alone is sufficient to point out the injustice and impolicy of institutions so opposite to the prosperity of the arts, and to all notions of good government, which require that manufactures should always remain with the public, and never in the hands of the sovereign; for they are the property of all, and cannot justly be restrained to favor the interests of any person. What idea can be formed of countries where subjects are not only deprived of the right of possessing lands, and of political liberty, but

* Relations concerning the Kingdom of Siam, vol. i.

† Travels in Persia, vol. ii.

also of the very fruits of their industry? Yet as the workmen at the court of Persia were paid regularly, even when sick, that circumstance blinded Mr. Chardin so far as to make him believe such establishments worthy of commendation. He did not perceive that the artists, treated in that manner, are vile slaves, to whom the *Nadir*, whenever infligated by caprice, can order stripes in the same manner that they are inflicted in the manufactories of the great Mogul, in those of the Chinese, and of the wretched kings of Siam. If the sovereigns of Asia could have invented any means of avoiding to pay and maintain those employed in their work-shops, they would soon have put them in execution. Incapable of finding any resource in that way, they consent to provide for their slaves; and thus, what astonished Mr. Chardin was not at all surprising.

In tracing the origin of these institutions, it was discovered to me in the Justinian code, where nothing of the kind could have been expected. The laws, contained there, are certainly very conformable to the ideas of the Asiatic despots, when they first established work-shops at their different courts; but in examining these matters we must begin a little higher.

The emperors of Constantinople, after having prohibited their subjects from wearing robes of purple, considered this law of such importance, that they endeavoured to remove even the possibility of its being transgressed. It was declared unlawful to dye any stuffs in that color; and to procure them, no other method was left than that of employing artists in the palace.

palace. Imperial dyers were therefore established, and makers of ink for signing diplomas, patents, and edicts; for it was likewise of a peculiar color, and we still possess the law enacted to prevent its being made or employed by private persons. The anxiety and weakness of those princes augmented, in proportion to their tyranny, until they thought fit, for their greater security, to have all the imperial ornaments fabricated in the palace of Constantinople. As they required the combined talents of many workmen, not only dyers were established at the court, but likewise goldsmiths, jewellers, weavers, shoemakers, embroiderers, belt-makers, saddlers, farriers, and a kind of people who passed themselves for engravers on precious stones.

The original expressions of the law of the emperor Justin, to which we allude, are to this effect:—
 “Whatever concerns the marks of sovereign authority, ought not to be wrought indistinctly in shops, and private houses; but must be made by the workmen of the palace, in the interior of the court*.”

The suspicions of this prince, on the manner that this law might be eluded, are as remarkable as the law itself. Those persons, says he, who shall cause imperial ornaments to be made, under pretext of offering them to me as presents, shall be punished

* *Nulli prorsus liceat, lib. xi. Ornamenta enim regia intra aulam meam fieri à palatinis artificibus debent; non passim in privatis domibus aut officinis parari.*—The reader is requested to consult also the laws found in the title de *Murilegulis*, and in that of de *Vestibus Holoberis*.

with death. That clause was necessarily inserted, otherwise it would have been difficult to prove any person culpable.

In these dreadful effects of despotism, we observe how the prince, distrustful in the extreme, endeavours to have himself surrounded by a great void, in rendering the court independent of the state. Wishing to be independent of every person, he relies on his domestic slaves, who cannot have emulation, and whose industry is of course very confined. Without affirming that the decay of genius at Constantinople proceeded entirely from such odious and tyrannical laws, we are justified in believing that they contributed greatly to the total ruin of the arts. Thus, about the period we speak of, things had attained such a degree of excess, that not one engraver could be found in the whole empire; as appears from the money, which is only scratched, and all the characteristics of the grossest barbarism are seen there. The pretended legislator, Justinian, could not write his own name; and those who engraved his medals were little more learned than himself. It is absurd to hear the Goths accused of having first destroyed the taste of fine architecture. The two Isidores, and Artemius, who made this prince superintend the building of Saint Sophia, were certainly not Goths; and yet we know how grossly they violated all the rules of art.

The motive of the laws we have mentioned discovers itself in absolute power, the disorder of government, the imbecility of the sovereign, and the corruption

bellowing which succeeded immediately, seemed to proceed from the bowels of the earth *. Those who conducted these mysterious spectacles must have been equally embarrassed to make artificial thunder, and to copy the effects of lightning. It is the height of ridicule to suppose, that those, who assisted at the mysteries, neither heard nor saw any thing of the kind, but that the whole was the effect of imagination, while fear presented this illusion at once to their ears and eyes. The ancients speak of all these things in a manner too clear to leave the smallest room for doubt; and the Greek Plethon, when describing such initiations, employs the terms least equivocal of his language, like *keraunus*, and *pyre*, for thunder and fire †.

It does not appear at all probable, that the machine used by the ancient comedians on the theatre was ever employed in the temples, or even in the vaults. This was called a *cerauniscopium*, and it threw the lightning with violence on the theatre from a place called *bronteion*, where, according to common opinion, the thunder was imitated by rolling stones in vessels of copper. The *cerauniscopium*,

* *Jam mihi cernuntur trepidis delubra moveri
Sedibus, & claram dispergere culmina lucem,
Adventum testata Dei. Jam magnis ab imis
Auditur fremitus terris, templumque remugit
Cecropidum. De Rap. Proserp.*

Some editions of Claudian have *fulmina*, instead of *culmina*; and *Cecropium* for *Cecropidum*, which is of less importance than the former.

† Pletho. Schol. ad Orat. mag. Zoroast.

from excessive indigence. Every thing that passes through their hands displays this deficiency of instruments; and the workmanship is as bad as possible on all the gold and silver vessels, which are indeed not many, in Turkey, Persia, Mogul, and China. Thus all the arts requiring, like watch-making, a great number of machines, and tools, are never cultivated in those countries, not even in the work-shops of the princes, whose luxury is directed to other objects. One thing, resulting from this, could never have been believed, were our information concerning it less exact. The trades exercised in established fabrics throughout Europe, are carried on in the despotic states of Asia by travelling artificers. Goldsmiths are seen there, who ask for employment at every door: they work in private houses, and place themselves in an instant; for they carry all their tools about with them, and these, as we have already observed, are few. The streets of the Chinese towns would not be so much crowded, if the people possessed regular work-shops, instead of being under the necessity of running continually from one quarter of the town to another. Blacksmiths are seen on the same day in ten different places, where they have the inconvenience of transporting always their anvils and bellows*. No great penetration is requisite to perceive, that excessive poverty drives all these wretched people to a wandering life, little better than beggary. The erroneous opinions long entertained relative to the

* Salmon's Present State of China, vol. ii.

learned in China, who were said to honor mechanics, while in reality they despised them, are now altogether exploded; but the ridiculous prejudice still remains of believing that the Turkish emperors must necessarily learn a trade, according to the fundamental laws of the state. The pretended industry of these princes is confined entirely to cutting tooth-picks, or such trifling things, with a knife; and we have only to read one passage in *Ælian* with attention, to be convinced that the ancient Persian emperors were employed in the same manner*. Thus, what has been taken for a trade is no such thing; and the supposed particular law of the Turks, is nothing more than an immemorial custom in all the despotic courts of Asia, where the princes are as weak as children, and must be amused with play-things. We have seen some remonstrances made by a mufti to the sultan Mahomet the fourth, who disliked all manual occupations, and there he speaks of nothing but the danger of idleness. When the Chevalier d'Arvieux was introduced to one of the greatest princes of Arabia, he found him employed, like the Persian emperor mentioned by *Ælian*, in cutting a stick with his knife; and it would be insulting mankind to maintain seriously that this miserable Arab exercised a trade.

* *Persarum rex iter faciens, ne tedium obreperet ex tempore, phyllirium gestare solebat, & quo id scinderet, cultellum; atque huic operi regia manus dedite fuerunt. Prorsus enim neque libellum, neque cogitationes vel ad necessarium aliquid, dignumque scitu legendum, vel ad magnum aliquid & memorabile consultandum versavit.* Hist. Divers. lib. xiv.

On considering the nature of Asiatic luxury, it appears clearly to be a necessary effect of despotism; and a rule might be established on that point, the application of which would be very just in Europe. Luxury increases in proportion as slavery augments, until arrived at a certain point, when it begins to change into a vain and gross ostentation. All works of taste, and master-pieces of the arts, are then excluded. We have heard of those precious housings used to cover the elephants of the emperor of China, and of those vests, valued at two lacks of rupees, with which the Mogul emperors sometimes clothe the Omrahs: The troughs where the horses of the Persian emperors drink, are said to be of gold, and their table-plate has been estimated at thirteen hundred thousand pounds: but who ever spoke of the pictures or statues of the emperors of China, Mogul, and Persia?

Men equally despicable, without any personal merit, who have never done any thing to acquire virtue, and to whom heaven has denied genius, have no other means of being distinguished from each other than by the color or richness of their robes, and by every thing that strikes the eyes alone of the vilest populace. Luxury, then, changes not only its nature, but even its very name. To conceive how this revolution is operated, and what is the intermediate point of the two extremes, it is sufficient to select an example in the history of any celebrated people, and mark the different epochs with some precision.

It

It was only immediately after the conquest of Egypt, that the Romans discovered great luxury*; it continued augmenting until the reign of Commodus, when it became pomp, and degenerated finally, under Constantine, into a barbarous and Asiatic ostentation. From the first of these epochs, to the very last, liberty was evidently diminishing, and the arts declined likewise.

By consulting all the monuments of antiquity, still extant, relative to the Eastern despotic states, it will appear that formerly, as at this day, the most precious and extravagantly rich stuffs were wrought. Gold brocades, says Chardin, are seen in Persia, so very magnificent, that each yard is valued at one hundred and thirty-five pounds sterling; and yet not one piece of furniture is seen with any signs of either taste or elegance. As intrinsic value is more esteemed in those countries than the execution, it follows: that the great artists, if any such were found there, would die with hunger. Luxury, degenerated into ostentation, has no occasion for any other than mere workmen; a blacksmith could have made the money of Constantine, his diadem, sceptre, and the harness of his horse. It is true that the type of the medals of the emperor Julian is nothing better, either in point of drawing or engraving; but he died too soon, or lived too late, to repair all the evils of despotism.

* *Explicuitque suos magno Cleopatra tumultu,
Nondum translato Romana in secula lux.*

It has been a thousand times asserted, that none but freemen can succeed in the fine arts; but the reason is neither so well known, nor so easy to find, as people imagine; and the more the effect becomes evident, the difficulty increases of divining the cause. In an object of such importance, it is necessary to employ something more than words void of sense, or bombastic phrases without meaning. The Russians have made freemen of those whom the court of Petersburg sent into Italy to study drawing, and the principles of painting. As, by this, they have neither changed the organs nor physical constitution of these pupils, it is asked, if by the mere act of declaring them free, their progress can be more certain than if they had remained in a state of slavery. Yes, it may be answered, provided they contained in themselves the bud of genius, which has not been given to them with their liberty.

The true mode of solving the problem, appears to consist in dividing hereditary slaves into two classes. Some never reflect on their misfortune; others dwell on it continually. In the first case, they are evidently destitute of penetration, with few more sentiments than negroes, or domestic animals; and those who attempt to instruct such men are sure to lose their pains. In the second instance we find slaves, who, sensible of that blessing of which they are deprived either by fatality or injustice, must be continually occupied with ideas of their deprivation. This melancholy thought absorbs all others so entirely, that they cannot pay that constant attention requisite for
the

from the great scarcity of wood. Anciently, as at present, the inhabitants of that country have been forced to use the dried dung of frugivorous animals for fuel; and the sal-ammoniac is produced simply by the foot of such substances. When Father Sicard pretends that the urine of animals was added, his authority must be considered as far inferior to that of the Coptes and Arabs, who have thousands of opportunities of seeing that operation at *Gizch*, and several places in the Delta, where it is performed publicly. We shall refrain from entering into any discussions relative to the opinions of those, who, like Mr. Schmidt, assert that the ammoniac of ancient Egypt was totally different from what is made at this day *; for we may judge how much the ancients can be depended on in this matter, when not one of their medical books can be found, where this salt is mentioned, without the addition of something notoriously fabulous.

The art of embalming bodies did not require, as some have imagined, any deep chymical knowledge; and a few repeated observations soon discovered the length of time necessary for the alkaline salt to penetrate the skin and flesh. This turn was always fixed at seventy days, and fortunately does not amount to two philosophic months of forty days each; otherwise the alchymists would have supposed it to contain many mysteries. It is very remarkable, that the fur-

* History of Commerce and Navigation of the Chinese.—This excellent Dissertation gained the prize of the Academy of Inscriptions.

very good workmen, but their antiquity is not by any means attested. All that is known of the state of sculpture in that country does not extend beyond some statues of *Menippi*, a symbolical monster with nine heads: for the Chinese, and the Tartars, who should never be excluded from that race, have affixed more extravagant ideas to the number nine, than the Egyptians to that of seven. Many of the ceremonies, and political institutions of China, are analogous to the same species of puerile superstition; such as the division of the mandarines into nine classes, and a thousand other absurdities, of which the most melancholy is that of punishing or degrading the relations of a criminal to the ninth degree. Writers, who neither examined nor weighed any thing, have mistaken these follies for tokens of wisdom.

What the Persians relate on the subject of *Manes*, must be regarded as greatly exaggerated. He is the only painter of their country whose name is known in the West; and this would never have happened, had he not been at the same time chief of a sect. The legends of his disciples have preserved many facts concerning this singular man, some of whose paintings exist still at *Tchigil*, a town of Turkestan, or of Igout, unless, as we have too much reason to believe, that place was destroyed by fire in the last Tartar wars*. Could any of the original productions of

* We find the reason why *Manes* quitted Persia, in Hyde's *Treatise de Religione Persarum*.

some nations between the tropics, whose flumbers were never disturbed by dreams; but they would have been much less deceived in attributing that prodigy to the people of the frozen zone. Mr. Boerhaave has observed, that sleep probably diminishes, in all hot-blooded animals, in proportion as the weakness of the stomach augments: in very warm countries this effect is so notorious, that if nature had not provided many aromatic plants, which must be taken in great quantities, scarcely any person would be capable of performing digestion. From this it results, that the vital spirits of the native inhabitants of such countries are greatly exalted, because they enjoy little repose. What is called enthusiasm in our poets, is, in theirs, a violent extacy; the most extravagant expressions do not appear, in their eyes, sufficiently strong to paint what they fancy they see or feel; and thus the verses of Pindar seem grovelling prose, in comparison with their compositions. It struck me, long ago, that the monsters and chimeras produced continually by the pencils of the painters, and the chisels of the sculptors of the East, originated in the same source with the metaphors, allegories, and exaggerated figures of the Oriental poets. This disorder of the imagination leads them beyond the limits of common sense, without which, nothing that is not monstrous can be either said or conceived.

Very little examination would have been necessary to prove, that such versifiers as we speak of here compose those phrases where they seem to place most emphasis without much trouble. *In comparing the*

pompous verses of Corneille with the natural lines of Racine, no person could suppose, says Montesquieu, that Corneille composed easily and Racine with pain *. The reason of this is, that to follow nature requires time, because it is necessary to think much, and select afterwards, from a great number of reflections, those which are best: but when people depart from nature, and abandon themselves to a torrent of ideas, they proceed very rapidly. The art of composing well will always consist in giving an appearance of the greatest facility to works where uncommon pains have been bestowed in the composition. People of ordinary genius, however, must never hope to attain this point; for they are incapable of approaching any thing of the kind.

What has been observed, with regard to the immutability of modes and manners in the East, might, in a certain sense, be extended to the arts, and particularly to painting. As the action of climate has undergone little change from time immemorial, the painters have likewise preserved at all times the same ideas in composing their subjects, and equal vivacity in the execution. It is said, indeed, that the *Hoa-pei* of China should be excepted; because they are believed to have grown more negligent than ever, during the last sixty years. This opinion, however, is erroneous, for the Chinese have only changed the coloring substances, and the paste of the porcelain. The workmanship continues to be precisely the same

* Fragment of an Essay on Taste.

as in one thousand six hundred and forty-four, except where some corrections have been made in such figures as were disagreeable to the Tartars.

Even supposing these people capable of calming their imagination, and improving their drawing, the singular construction of their optic organs would prevent them from ever excelling as painters. This disposition is the reason why they admire none but the most lively colors, and such extreme contrasts of tints as create antipathy, instead of that union indispensably required by the Europeans. The colors, called enemies, from being so offensive to our eyes, when placed near each other, are to them the most gratifying of all. Besides, as their painters have no idea of giving austerities to their too florid coloring, either in the shades or deepenings, and employing very few demi-tints, they cannot be said to paint, but merely to color drawings. The pictures of European masters, particularly those in oil, appear to them morbid, as if tinged with smoke; and the darkest pieces painted by Rembrandt, would certainly be frightful in their eyes.

Their inclination for glazing colors proceeds from the weakness of their eyes, which require strong impressions. It is believed that the more a country is dry and serene, the less favorable it should be considered for the sight; and in this point, indeed, humidity seems to be very advantageous. But independent of this general cause, the inhabitants of southern China, and a part of Japan, are very subject to a

Of all the discoveries claimed by the Persians, that of mosaic appears to be best founded, in the opinion of Mr. Furietti *; because he saw what every person must have noticed, that mention is made of a pavement of colored stones in the Book of Esther. But he should have remarked, that the Arabian authors likewise speak of such works, some of which, they say, were incrusted with pieces of glass. Thus it appears that the Persians possessed that art in common with other Eastern nations; and the Egyptians were probably of the number †. Mr. Michaelis does not even exclude the Jews, in his treatise entitled the *History of Glass among the Hebrews*; although it is impossible to produce even the smallest appearance that any manufactories of glass-ware existed anciently in Judea; for the manufactures of Tyre and Sidon must not be attributed to that country. It cannot however be denied, that those colored pavements were really mosaic work, an invention brought into repute in proportion only as the art of painting declines. Without speaking of what is practised in Italy at the present day, it is certain that workmen in mosaic were never more encouraged than under Theodosius and Valentinian, when not one good

* De Musivis, capite primo.

† Lucan expresses himself thus in describing the luxury of Cleopatra:—

— totaque effusus in aula

Calcabatur onyx.

This cannot be understood otherwise than as a pavement in the Persian taste.

generated in Italy, although the Romans spared no expence in procuring the most precious water-colors from the East-Indies, by the way of Egypt*.

Few motives induce the inhabitants of warm climates to leave their native country. Merchants travel there from thirst of gain, and pilgrims through fear of hell; but those who are artists, or workmen, never go abroad for improvement, and they acquire little at home. What we call polite literature, the study of languages, history, antiquity, and sound criticism, are altogether unknown in southern Asia. This ignorance produces that rudeness of style and genius, which has been erroneously imputed to the custom of confining their women. The female sex enjoyed infinitely more liberty at Rome than at Athens; and yet we know how much the Athenians were superior in the fine arts. The conversation of women was besides very far from softening the disposition of the Romans, who remained constantly addicted to frightful scenes of expiring gladiators, combats of wild beasts, and all the other atrocities exhibited on the Arena. Finally, experience proves that the taste and genius of a nation become much more corrupt, when too great liberty is granted to the fair sex, than when they are confined within reasonable

† *India conferente fluminum suorum limum & draconum & elephantorum saniem, nulla nobilis pictura est.* Plin. lib. xxxv. cap. vii.
—He took dragon's blood for an animal production; and his error was exactly the contrary of that into which Pomet fell in his History of Drugs, where he supposes cochineal to be a vegetable substance.

vanced by Tavernier, concerning the ruins of *Tchel-minar*, which he took great pains to depreciate. Tavernier scarcely knew how to read or write, and those who are known to have assisted him with their pen, were such very indifferent compilers, that little dependance can be placed on his information relative to the antiquities of Persia, and different points of erudition and criticism. What has been asserted by a monk, named Emanuel, does not deserve more credit; although cited in the *Memoirs of the Academy of Inscriptions*, on the subject of some statues, now extant, according to him, at two leagues from *Kirman-Shah*, on a mountain of Media, where the ancients likewise placed many chimerical monuments attributed to Semiramis. All that we know of this matter is, that some sculptors, brought up in Egypt, have wrought in Media; and perhaps also at the edifices of *Tchel-minar*, or *Eftakar*, where they seem to have intermixed some of their own symbols, such as the winged circle with the emblems of the religion of the Magi. In general, the Persians, ever since the reign of Xerxes the first, began to acquire some superiority in the arts over the Indians, who are reputed to work worse than all other Asiatics, except perhaps the Chinese. Yet the *Schastab* and the *Vedam* do not, nor ever did, prohibit painting, statuary, sculpture, or engraving, either hollow or in relief.

If all the worships of the East partook of the gloomy and melancholy character attributed to Mahometanism, it would not then be so easy to determine,

mine, in this point, the influence of climate and political institutions ; for the little progress made there in the fine arts has been attributed entirely to religion. By the confession of both Turks and Arabs, it is evident that Mahomet could neither write nor read. Thus he did not imbibe the aversion he always testified for representations of living creatures from having perused, as some believe, certain compositions of the Ignicoles *; but it proceeded from a corruption of Judaism, which constantly received an increase of superstitions, as a stream is swelled in its course. The learned agree that, previous to the time of the Maccabees, the Jews never discovered much horror for images, nor even for the symbolical figures placed in the temple of Jerusalem by artists who came from Tyre. Although Origen, in his work against Celsus, affirms that the barbarous inhabitants of Judea had not in his time one single painter or sculptor amongst them, it does not follow that they had likewise renounced engraving on precious stones, signets, and coins. Since their departure from Egypt, until the present moment, the Hebrews have constantly applied themselves to that art ; yet not one of them ever attained any great degree of excellence. Is it an error to believe that the temptation of falsifying money has inspired them with so much inclination for this species of engraving, which they are allowed to practise publicly in Europe, contrary to all ideas of sound policy?

* In the Arabic text of the Koran, the prohibition of making images is less clearly expressed than we are generally taught to believe,

SECT. V.

STATE OF CHYMISTRY AMONG THE EGYPTIANS AND CHINESE.

IT is almost inconceivable, that some men should have had the weakness to write books, for the sole purpose of demonstrating that Egyptian mythology concealed nothing from our eyes but chymical secrets. An obscure monk, to the disgrace of the eighteenth century, has now published a compilation on that subject, which discovers as much ignorance of fable as of history. In comparison with his, the work of Tollius was a thousand times more supportable; and, instead of being imitated, the follies of that author should have been forgotten *. With regard to what is found in the pretended hermetic philosophy of the Egyptians, in Conring, Borrich, and a volume of the *Œdipes* of Kircher, we shall refrain from passing any judgment, in order to attach ourselves to things much more probable.

The Jews of Egypt, who had emigrated from Palestine under the first Lagidæ, had been almost entirely ruined in the reign of Cleopatra, who detested that colony of monopolizers and usurers: but the conquest of the Romans was still more fatal, by depriving them of the tolls on the Nile, and the ma-

* This work, so unjust to the memory of Tollius, is entitled, *Fortuita, in quibus præter Critica non nulla, tota fabularis Historia, Græca, Phœnica, Ægyptiaca, ad Chymiam pertinere asseritur.*

those edifices are filled almost entirely with such ill-made images. Many symbolical figures are likewise seen there, frequently in the attitude of baboons, like the statues of *Sommona-Kodom* at Siam, and sometimes in positions altogether unnatural; for the legs and arms are extended in a manner impracticable by the human body. It seems probable that the sculptors of that country, through ignorance of the laws of gravitation, have exaggerated the postures of their fakirs, who resemble satyrs, by placing their hands on the ground, and lifting up their feet in such a manner that the heels rest on the elbows, and in this situation call out, O but God is powerful! O but he is majestic!

Although the Indians have always distinguished themselves by their attachment to polycephalous statues, or such as have several heads, and supernumerary members, even to seven or eight pair of arms on one body; it is not less true that the same shocking corruption of taste infected likewise the greater part of the Eastern nations. Even the Greeks have not been totally exempt; for, besides their statues with two and three faces, it is certain that the wings they were so fond of placing on others betray a secret inclination for such extravagancies. Had the climate of Greece been six or seven degrees warmer, many artists there would have degenerated into the Oriental style; and it has been observed that, in Ionia, wings were already placed on certain statues, which had not received them in Peloponnesus.

Some

Some travellers have believed that the mode, so long practised by the Indians, of having painted and embroidered robes for their idols, has prevented them from employing much art in sculpture. This custom however is not universal. If some statues in the pagodas of *Matoura*, *Benares*, and *Jagrenat*, are clothed, others are found naked at *Tyronameley* in the Carnatic, although they exhibit neither more grace nor life than those covered with stuffs*.

Works of sculpture, apparently very ancient, have been dug up in different places of the East Indies, and of the south of Asia, such as the remains of the pagoda of *Elora*, the old statues of the coast of *Decan*, of *Canarin*, in the isle *Salfette*, and in *Elephanta*, another island off Bombay, where a subterraneous temple was seen by Ovington in one thousand six hundred and ninety, and by Grose, towards the year one thousand seven hundred and fifty-two†; but neither of them had sufficient knowledge of the arts and of literature, to produce an exact description. We only know that the architecture does not resemble any of the three Grecian orders; and its participating of the Eastern style is a sufficient refutation of the opinion that it had been erected by Macedonian colonies established there by Alexander. It was perhaps in these grottoes of *Elephanta*, that the Brachmans preserved that idol so mysterious, mentioned by Porphyry, which was seen by the Syrian Bardesanes.

* General History of Travels, vol. xiii.

† Grose's Voyage.

With

With regard to the bas-reliefs in metal, seen by Apollonius at the court of an Indian king, nothing of the kind is now known in that country. This leads to suppose that such works never existed, but that they had been invented by Philostratus, as well as the fabrics of Egyptian architecture in India, of which likewise no traces can be found. This Greek, in writing his romance, took delight in furnishing the palaces of some Asiatic sovereigns, without perceiving that his ornaments were frequently contrary to the taste of the country. These strange bas-reliefs must have resembled greatly the *pictures of Philostratus*, which were destitute of disposition; and the complication of subjects is such, that the most able painter could not possibly execute them, even by sacrificing, like the ancients, every thing belonging to perspective.

The productions of the modern Indians, compared with ancient monuments of undoubted authenticity, prove that, among them, the arts have remained invariably at the same point, since time immemorial. If they are not improved, they cannot be said to have degenerated; and this has been attributed by some authors to the division of the people there into tribes, some of which, it is well known, are composed of artists who have not permission to enter into the class of Bramins or any other. All these political institutions are supposed to have rendered the Indians inferior even to the Chinese; but the superiority of the latter is far from appearing decided; and admitting
it

The Egyptian monks, with all their insatiable thirst of gold, and blind hatred towards the memory of Dioclesian, remained in an indigence almost without example. Had they even succeeded in amassing any wealth, the Arabs would soon have interfered; for those robbers are very expert at carrying away whatever they find in monasteries; and we may suppose, that their readiness to pillage houses of that kind is founded on the opinion of the riches they must one day contain, when the alchymists shall be more fortunate. It is certain, that the Arabs are still more infatuated than even the Coptes, with two ridiculous opinions: some believe that all the considerable ruins of the ancient Egyptian edifices contain treasures, guarded by spells, which may however be broken: and others, convinced that mercury is the only substance capable of transmutation, carry about constantly small boxes of that metal, that they may never be totally unprovided. In one thousand seven hundred and fourteen, the scheic Selim presented his provision to Paul Lucas, begging him to make some experiments*; although, in the place where they then were, it would have been impossible to find either furnace or coal. At one time the news circulated, that another scheic had discovered a very ancient manuscript, preserved by the greatest chance from the researches of the emperor Dioclesian, and containing all the secrets of chymistry. Those who

* Travels in Upper Egypt, vol. ii.

that the artists of those countries have known, in very remote times, certain practices considered by us as new inventions. Our travellers frequently want time, and perhaps still more, capacity to describe different operations of the Asiatic manufactures. The observations scattered in the *Edifying Letters*, and some particular relations, are far from forming a complete chain of the principles adopted by the Indians in painting their stuffs, properly called *kallencards**, as well as those executed with moulds, which have led to printing books, according to the manner practised in China, Japan, and, probably, likewise in Hindoostan. We do not even know what pencils are employed by the Indians; for the caustic liquors burn in an instant those made with hair; and nothing better has hitherto been imagined in Europe than splits of soft wood, which are indeed very imperfect instruments.

From India, all through western Asia, the Mahometan painters work at nothing but arabesks, or particular kinds of spotted grounds, seen on the walls of some mosques. The pictures in oil, and on canvas, brought from the Levant, are made by wretched Armenians, who have no notion whatever of design; and their compositions are altogether without taste. If they have served as models for engraving a collection of Turkish dresses and Greek modes, it was only that our artists might have some idea of their dresses,

* This word denotes the patterns done entirely with the pencil.

which these bunglers frequently change by clothing them ridiculously.

It is very surprizing to hear Lord Baltimore, in his travels of one thousand seven hundred and sixty-three, informing us seriously that *Constantinople is not the place to look for pictures* *. None are to be found even as far as Barbary; for the principal palaces of Fez, Morocco, and Mequinez, afford nothing more in that line than some walls and ceilings, where gilding is employed on a blue ground, to represent stars and crescents †. Numberless inscriptions are likewise seen there, with all those interlacings and flourishes, of which the Arabic characters are so susceptible; for those who cannot paint must have recourse to writing, otherwise their works would say nothing. It may be allowable to observe on this occasion, that nothing but prejudice in favor of the ancients could have induced modern writers to apologize for Polygnotus, who is known to have written on his two great pictures at Delphi the names of all the personages ‡, exactly as the names of animals are seen in capital letters on the mosaic of Palestrina. The researches made at *Herculaneum* have produced monuments of the same nature, sufficient to prove that the paintings of Polygnotus trespassed against all the rules of per-

* Voyage in the Levant.

† Mouette, in his History of the Conquests of Mouli-Archy, known by the name of the King of Tafilet, exaggerates greatly the ornaments in the palace of the emperors of Morocco.

‡ Pausanias in Phocid. lib. x.

spective,

spective, were we not assured of this by the description of Pausanias.

If some Greek artists, born at Cyrene and Alexandria, are excepted, Africa cannot boast of having produced any great painters, not even among the Carthaginians in the most flourishing days of the republic. The Moors, who invaded Spain, cultivated no other painting than that which still preserves the name of *mauresk*; and it appears to have been under their pencil a species of decoration altogether absurd. Some indeed pretend, that they painted animals likewise in the same style with those found in the ruins of *Cintra*: but even supposing that these ornaments were not deposited there in later times, they certainly denote neither great taste nor any real knowledge of art. After examining attentively all the fragments of the numerous palaces and other edifices erected by these conquerors, no traces can be indicated of any remarkable talents in their painters, who were besides cramped in their pursuits by Mahometanism. What has been said of manufactories of painted stuffs, established by them in Spain, seems to have originated in the preference given by the Moors at all times for clothes of that quality. Such articles however were all brought from Egypt, where they were colored by a chemical preparation, already noticed in the beginning of this Section *.

The Coptes, at this day, are ignorant of even the names of the arts and sciences cultivated by their ancestors, Superstition in the first place made them

* *Pisti tunica, Nilotide Mauri.*

chants, who having kindled a fire on the Phenician shore, saw the sand enter into fusion, and found, in that manner, unexpectedly, the method of making glass. Mankind had made fires in the same way many thousands of years before the existence of town of Tyre; and in certain cases, even the ashes of wood, or dried herbs, are sufficient dissolvents. It was therefore superfluous to suppose, that these adventurers had the good fortune to find some alkali in their boat; and this circumstance has evidently been added afterwards, to support an incongruous fable. The concurrence of fortuitous causes has not been so powerful in all such inventions, as people generally imagine; and the procedures must have been developed one after the other. Chance seems indeed to have had little to do in the discovery of glass, which could only be a consequence of the art of pottery. Different compositions, resembling porcelain, were first employed; and some nations never got farther in this art; while others contented themselves with the use of a species of enamel. In America, so late as the year one thousand four hundred and ninety-two, no glass-ware had ever been produced; and yet some of the savages there knew how to enamel their earthen vessels. This we learn from Newborough, a judicious and enlightened man, who is mentioned with praise in our Philosophical Dissertations on the Americans.

Clay of the best kind is very rare in Ethiopia; and almost every substance dug from the earth contains sand. The vegetables produce more alkali than in
other

tain, that their archives must contain many circumstances tending to throw light on different parts of Chinese history. For this purpose, it would be necessary to know thoroughly the language of Thibet; while the Arabic alone would be sufficient for making researches at *Balk* and *Samarcand*. The difficulty of penetrating into Japan, and remaining there stationary for some years, prevents all projects of sending learned men thither. The fragments, sent by French Jesuits from Pe-kin to their friends in Europe, are of no importance whatever; and no idea can be formed how little the work, entitled, *The Military Art of the Chinese*, by *Father Amiot*, corresponded with the expectations it excited previous to its publication. This missionary seems to have been very little versed in the matters he treated; and it seems truly surprising to hear him asserting, that each Chinese soldier makes with his own hands the powder for charging as well as for priming*. The firelocks of the Chinese at this day are undoubtedly copied from the musket with a rest, used by the Portuguese and Spaniards towards the end of the fifteenth century: and the models have probably been sent from *Macao* to the interior of China. These very ill contrived machines are fired with matches, and supported by forks fixed to them in such a manner that it is impossible to form the soldiers in three ranks. Besides, we have every reason to believe, that the lines are reinforced by people armed with bows and darts. Yet this clumsy

* Chinese Art of War, with colored prints, Concerning this work more shall be said hereafter.

arquebus furnished the Mandhui Tartars with the idea of a very efficacious weapon, which enabled them, with the assistance of field-pieces, very easily transported, to reduce the *Eleuth*, and make the emperor *Kien-long* possessor of more territory than even was conquered by *Genghis-kan*. He is supposed to be master of the third part of the continent of Asia, and in all his vast empire scarcely a single soldier is to be found, for the militia of that country is almost entirely composed of Tartars. When some weak and indolent princes succeed each other in the present dynasty, the power of that government will be overturned more speedily than it was erected.

The Chinese pretend, that they cannot employ flints, because, by an effect of climate, they become so humid, that not a single spark is produced from steel. But as nothing of the kind has been observed in the fire-arms brought from Russia to Pe-kin*, we may conclude this to be a fiction, intended to excuse the awkwardness of their workmen, who are incapable of forming the different parts of the locks.

What gives most reason to suppose the Chinese possessed of some considerable degree of chymical knowledge, is the use they make of so many substances to color their porcelain. Yet it is impossible to conceive any thing more simple than their manner of preparing them. The red alone, which is extracted from a kind of copperas, is produced by

* Bell of Antermony.—Many flints are brought from Europe to China.

means

The ancients, indeed, had sometimes mirrors suspended in such a manner, that the effects they produced were considered as preternatural. Something of this nature was certainly erected in the temple of Smyrna; but Strabo has described that of Heliopolis, without saying one word of those rays which descended on the altar, while the spectators could not perceive the source of light. This pretended illusion therefore did not give rise to what is now practised in a church of the Christian Coptes, dedicated to saint Danicanus, where the monks, by means of two small windows, caused shadows to appear on the opposite wall. That edifice, situated near *Tekebi*, about twenty-seven leagues from the ancient Heliopolis, does not appear to have been built according to the true principles of optics, for the express purpose of deceiving the people; but if Vansleb, and Father Sicard, had been more versed in physics, they would have remarked that shadows could not produce any effect in any well-lighted place*; and therefore we may suppose, that the darkness had been increased, to favor an illusion nearly similar to what is produced by a camera obscura. This trick appears to have been somewhat less awkward than those practised by some Neapolitan impostors; but all attempts to deceive the people, in religious matters, are equally abominable in the eyes of philosophers.

My patience has been exercised not a little in reading what is written by an academiſt of Barce-

* Vansleb's Journal, and Memoirs of the Missions in the Levant, tom. ii.

lona, concerning the history of the great mirror of the Pharos, at Alexandria*. He supposes that, by its means, objects could be seen as far distant as with the aid of a telescope; and afterwards he enters into useless details, to prove that the ancients knew how to tin glass, citing a passage of Isidorus, who died in six hundred and thirty-six, and another of Vincent de Beauvais, a writer of the thirteenth century. Neither the one nor the other had any thing to do with the matter, for it was necessary first to prove by the testimony of authors who had written previous to our era, that a mirror of the kind did once really exist; and then he might have proceeded to reason upon it. But neither Ptolemy Euergetes, nor any of his successors, ever thought of such a folly. In fact, the story of the mirror on the summit of the tower of Pharos, was as destitute of truth as that of the four glass cray-fish, said to have supported the building. Vossius indeed, who is no less famous for erudition than notorious for weakness of judgment, has pretended to explain this fact, by supposing that these cray-fish were formed of the lapis obsidianus, either pure, or adulterated with a species of black glass, which the Egyptians knew how to cast into statues†. Whatever the manuscripts in the possession of Vossius might contain, we may be assured, that this fable was forged by the Arabs, who appear likewise to have invented the story of the *smaragdine table*, or that prodigious slab of emerald on which

* Philosophical Amusements on different Parts of Science.

† Commentar. ad Pomp. Melam.

Hermes, a person who never existed, is said to have engraved, with the point of a diamond, the secret of the philosopher's stone. Some of the Bedouins, at this day, are silly enough to believe that this table is concealed in the *Harem*, or the largest of the pyramids of *Gizeh*, where not even an inscription appears in either of the two apartments, nor any thing that could lead to suppose it to be the depositary of any secret. If ever the exterior exhibited hieroglyphical characters, they must have been effaced by time; for nothing of the kind can now be traced there. This tradition of the Arabs has evidently arisen from their confounding the *smaragdine table* with the colossus of emerald, which Apion, as cited by Pliny, affirms to have been preserved in the labyrinth at the time he wrote. This however could be nothing more than a piece of colored glass, such as the Egyptians had already fabricated in the days of Sesostris: for we must reject the idea of those who believe it to have been the lapis prasius of emerald; because nothing of the kind is produced in the two places in Egypt, where such precious stones are found. One of these mines is situated to the westward of the Nile towards Libya, between *Ipson* and *Thata*; and the other on the shore of the Arabic Gulf, a little beyond the twenty fifth degree. The latter does not appear to have belonged anciently to the kings of Egypt, but to the sovereigns of Ethiopia, who waged a very long war in support of their claim on this district, as well as the town of Phyle*. The Arab

* Heliodorus, *Æthiopic. lib. ix.*—We find by this author that the Persians, in conquering Egypt, took possession of the mine of

Abderrahman, who was on the spot, says that the emeralds are covered with a whitish incrustation, without any appearance whatever of lapis prasius; and the three different kinds found there are alike purified by means of warm oil.

Although the execution of statues in colored glass, practised by the Egyptians, required much expertness, yet to counterfeit the murrins, supposes still greater abilities. It is most astonishing, that, after all the researches made by the learned in Europe, nothing certain has been communicated to us concerning the substance employed in forming those famous vases. The price they bore was excessive, but not equal to what Father Hardouin has calculated; for it is well known that he mistook the sesterces for talents, and this was exactly like confounding shillings with guineas. Thus, according to his foolish perversion of the text of Pliny, and an estimate of the talent given by Count Caylus*, it results, that the murrin, broken by Petronius, must have cost fifty-six thousand two hundred and fifty pounds sterling. The Cornelian vase, representing the mysteries of Ceres, taken by a foldier at the siege of Mantua, has never been estimated at more than one hundred and fifty thousand German crowns: in fact, it never was worth the twentieth part of that sum, al-

though emeralds, which they were forced to restore to the Ethiopians; and from this we may conclude that it had been their property long before the invasion.

* *Memoirs of the Academy of Inscriptions*, vol. xxiii.—This computation, which makes the talent amount to 180*l.*, is far from being exact.

though

though ornamented with bas-reliefs; while the murrins, on the contrary, appear to have been quite plain, without any signs of engraving. The common opinion, with regard to the matter employed in forming such vessels, is detailed at considerable length in the work of Mr. Mariette*, who pretends that they were Chinese porcelain. But all those, who, since Cardan and Sealiger, have adopted this absurd sentiment, could never maintain it against the smallest of many objections.

The Romans, so far from giving exorbitant sums for the china-ware known to us, would never have permitted it to remain among their furniture; because the rude and ridiculous drawings exhibited on such pieces, must have made a disagreeable contrast with the productions of Greece. Neither has any ancient author ever observed that the murrins were brought from some unknown country, like China. They came from different places in the East, from Persia, Carmania, India, and the Thebais; but those of the latter province were only a composition imitating the murrins.

It is in vain that researches are made at this day, in the richest collections of antiquities, for something similar to those celebrated vases; and if any still remain in Asia, they are no longer known. Carmania, now called *Kerman*, produces nothing but a kind of fardite stone, some belemnites, and a porcelain of a yellowish tint, much inferior to that of Japan. As

* Treatise on engraved Stones, vol. i.

that

that country, however, furnished the finest murrins, and a very precious alabastrite, it is to be wished that the English and Dutch, who have factories at Bender-Abassi, Ormus, and Gomron, would enable some naturalists to examine the productions of *Kerman*, and a part of *Fars*. Perhaps the word Murrin, which should be written without any aspiration, and is not derived from either the Greek or Latin, may be used still in some places of southern Persia.

By the second chapter of the thirty-seventh book of Pliny, we perceive clearly, that the murrins were not painted with the pencil. They exhibited irregular spots, and undulating veins, partaking of purple, or white, and producing many shades, where these two colors were more or less united. Of all the china-ware known to us, none corresponds with the description of Pliny, not even what is called *cracked porcelain*, where small lines, crossing each other in every direction, have often the effect of making the vase appear entirely shattered. Although this is more rare, and without comparison more costly, than what has regular figures, yet it certainly presents nothing very agreeable to the eyes. Another species, probably never brought into Europe, might more pardonably be considered as the murrin of antiquity. It is called *yao-pien*, or transmutation; because the paste changes into a substance resembling agate. The Chinese are incapable of producing this at will; and all they know is, that certain vases, and particularly those colored with red, become, while in the fire, what they call *yao-pien*. This is entirely

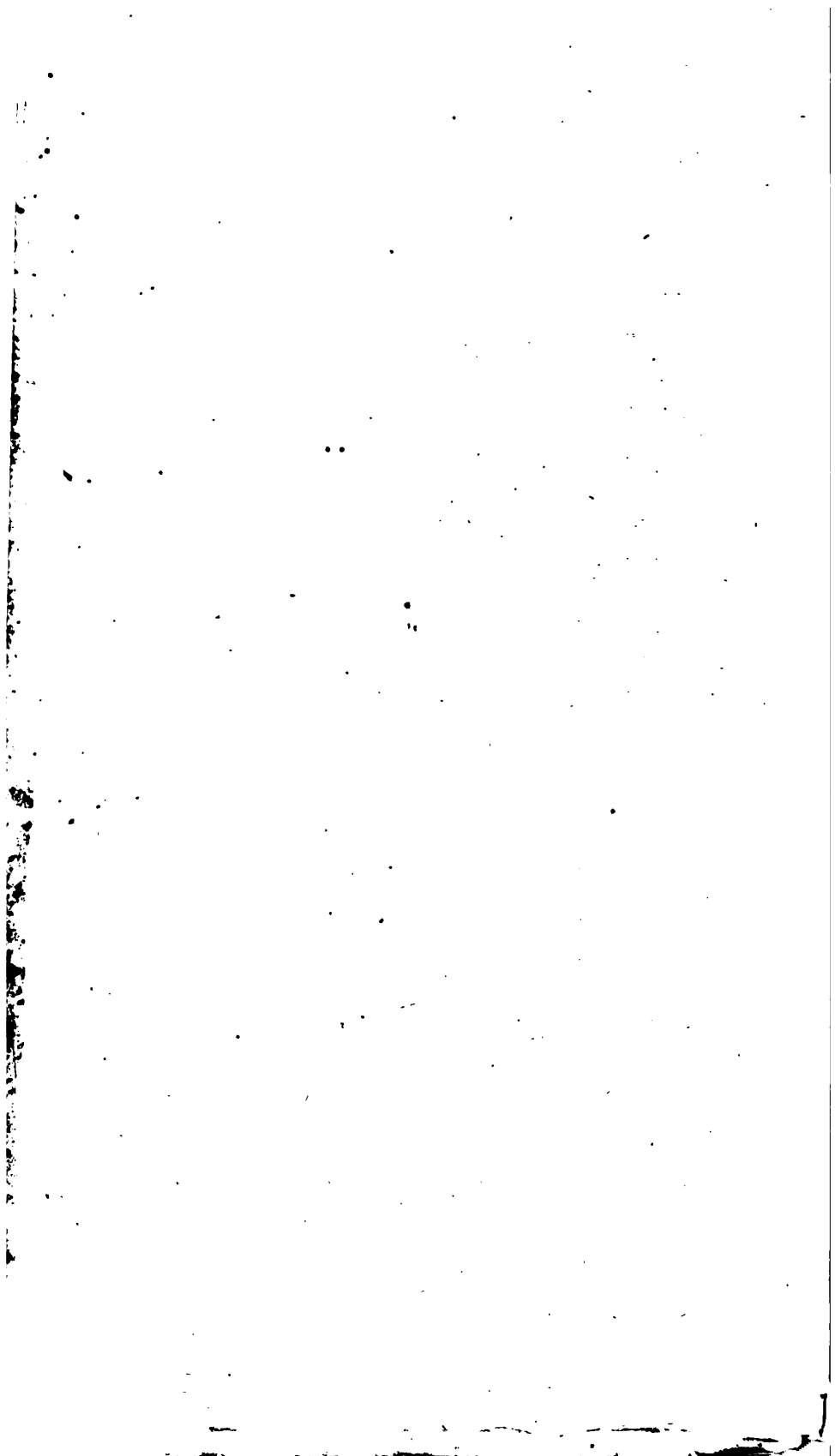
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an effect of chance, contrary to the intention of the workmen ; and it seems that, either from some defect in the paste, or too great heat, these productions are almost entirely vitrified *. They must consequently break, if filled with boiling liquor ; while the murrins, on the contrary, as Martial informs us, received no injury from warm wine †. Besides, it cannot be supposed, that the porcelain of Asia, so cheap at present, could anciently have been so very dear, particularly when the Romans traded directly with the East Indies, by the Erythræan Sea. But the Parthians, it is said, then intercepted the productions of China, and made the Romans purchase them at whatever price they could be procured. This error originated with Mr. de Guignes : according to him, the emperor Marcus Aurelius sent an embassy into China,

* It seems probable that the vases which change into *gas-pien* are formed of some vitrifiable substance, without any mixture of the real *pet-untse* ; and the red color, which is composed of copper, most probably contributes to that effect. The Memoirs of Father Dentrecolles contain the following information : “ This red color,” says he, “ is applied to the porcelain before baking, and it receives no other varnish. Some care, however, is necessary to prevent the red color from running off while in the fire. They assure me, that when they wish to give the porcelain this color, no *pet-untse* enters into the composition : but a yellow clay, prepared in the same manner with the *pet-untse*, is employed in its stead, to mix with the *ka-lin* ; because we may suppose it is more proper to receive this color.”

† *Si calidum potas, ardenti murra Falerno
Convenit, & melior fit sapor inde mero.*

in



cient authors *. With regard to the moderns, he neglects them very much, and does not even mention those curious details found in the Glossary of Du Cange, at the word *Madre*. Among other things, Christius proves, by the clearest arguments, that the murrins could not be porcelain, but stones partaking of the nature of alabastrites, or omychites. According to my own opinion, they could not have been calcareous; and art certainly added greatly to their beauty. We may suppose that they were clarified, not with a mixture of honey and the juice of the yew-tree, which was employed by the ancients to improve precious stones, but by being exposed in ovens to a certain degree of fire. This leads to explain the celebrated distich of Propertius, which has so much puzzled commentators †; and it might be thus translated: *The merchandize sent to us from the shade of the Theban palm-trees; and the murrin vases baked in the furnaces of the Parthians*. As Propertius, in another part of his poems, says, that the murrins partook of the nature of onyx ‡, we may believe that, in the passage already quoted, he speaks of the true

* Joh. Frid. Christii de Murrinis Veterum, liber singularis.—
This is the distich in Martial which Christius has omitted:

*Nos bibimus vitro, tu murrâ, Pontice, quare?
Prodat perspicuus ne duo vino calix.*

† *Seu quæ palmiferæ mittunt venalia Thebæ:
Murraque in Parthis pocula cocta focis.*

‡ *Et crocino nares murreus ungat onyx.* Propert. lib. iii.
We see by this verse that Propertius was very far from taking the murrins for porcelain.

kind

kind brought from Persia, and the spurious productions of Egypt.

After all these details, which we have compressed as much as possible, the great difficulty remains of determining how, and of what substance, the Egyptians composed the false murrins. At first, we might be led to believe, that a kind of gypsous alabastrite was employed, which, containing nothing calcareous, could support a sufficient degree of fire to incorporate the colors. This stone, found in abundance in the quarries of Heptanomis, about sixty leagues below Thebes, was greatly inferior in beauty and quality to the alabastrites of Carmania *. Pliny however destroys this opinion, by assuring us positively, that the spurious murrin was glass, *vitrum murrinum*. Thus the Egyptians employed only vitrified compositions, with which they endeavoured to impose on those among the Romans who were not connoisseurs. They succeeded to a certainty in deceiving such unpolished nations as the Moscophagi, and all the inhabitants of the eastern coast of Africa, from the fifteenth degree to *Berenice Epi-dires*, or *Cape Rasbel*. Thus we find, that the greater part of the false murrins passed into the ports of the Arabic Gulf †, to be distributed among the nations already mentioned.

* The ancients, in speaking of the alabastrites of Egypt, seem to have alluded to some colored and calcareous stone. But the alabastrites, or false alabaster of the moderns, is a vitrifiable substance; and our notions in that point are better founded than those of the ancients.

† *Peripl. Mar. Erythr.*

The real murrins must have disappeared entirely during the invasions of the barbarians, who destroyed more perhaps than they carried away. We have reason however to suppose, that the most precious were transported to Constantinople, where no more traces of them can now be found, than of that statue of colored glass, resembling emerald, which was seen there in the days of the emperor Theodosius. According to tradition, this extraordinary production was preserved in Cedrene, and had been executed in Egypt under Sesostris: If monuments of such magnitude could thus be annihilated, it is easy to account for the fate of the murrins, especially as they were scarcely less brittle than glass. With regard to porcelain, Count Caylus believes the Egyptians had some of a very tolerable quality; and to prove this, he mentions a small statue with hieroglyphical characters painted in black on blue enamel. But to judge with certainty of this substance, it would have been necessary to break the image. Many such pieces come from Egypt; and among others the Chevalier Montaigne brought several, none of which were formed of any thing at all like porcelain. The matter under the enamel is only white earth, friable and light, of the same nature with the old earthen ware, corruptly called *majoliche* in Italy, and which has been so much valued, from an idea that Raphael, and some other great masters, had painted vases of that kind *. But we have little reason to believe that

* The most detailed work we possess concerning the painting of the majorica is in Italian, and entitled, *Istoria delle Pitture Majoliche fatte in Pesaro e ne Luoghi circonvocini*.

Raphael

Raphael ever meddled with majolica ; and the works of Reubens on glass appear to have been much more certain. We may therefore doubt that the Egyptians manufactured any thing better than an earthen-ware, held in some estimation, when, by means of particles of mica mixed with the glazing, it seemed as if powdered with silver. This manufacture however belonged to the town of Naucratum in the Delta, and was consequently in the hands of the Greeks, whose productions should not be confounded with those of *Coptos* in the *Thebais*. The latter do not appear to be at all varnished, otherwise they could not have imbibed an odor which remained for a length of time, and was certainly communicated by some drugs. All the researches hitherto made on different parts of Egyptian mineralogy, have furnished nothing satisfactory concerning an odoriferous clay, said, by Prosper Alpin, to be found in abundance round the Matareg, the site of which is supposed to be nearly the same with that of Heliopolis, beyond the Delta.

Mr. Maillet has always maintained that the ancient Egyptians were exceedingly delighted with fire-works and illuminations ; and in fact many circumstances tend to justify this opinion. The testimony of *Ælian*, however, cannot in this point be relied upon, because he only copied Herodotus, the only author who ever spoke of a palace illuminated every night by order of Pharaoh Mycerinus. The History of that prince seems to be altogether a romance, which has produced the most ridiculous consequences ; for the Jesuits have quoted it in their relations of China, to explain the *festival of lamps*, concerning which we
are

are now much better informed. Herodotus pretends, besides, that a general illumination took place once every year, from the cataracts of the Nile to the shore of the Mediterranean; we have reason however to believe, that it did not extend beyond the small district of the town and prefectory of Sais. This ceremony consisted in lighting a great number of lamps at the approach of night. Why the Egyptians threw into each a quantity of salt is difficult to conceive, unless it was intended to vary the color of the flame, or to retard the consumption of the oil: at this day the secret is not easily penetrated*.

Here is the proper place for introducing some discussions, entirely new, on the manner of imitating thunder and lightning in the mysteries. It is certain, that such phenomena were heard and seen by the initiated. What passed in Arabia, at the *Gebel-Tour*, is foreign to our subject; but we must observe, that the Egyptians, having first introduced all that parade into the mysteries, which was afterwards imitated in Asia and Europe, should be regarded as the inventors of artificial thunder. Apollonius compares the effects of the flashes of lightning to those of the sun: at his initiation into the Isiac worship at Corinth, he observed with attention all the singularities of this spectacle†.

* *Lucernas plurimas accendunt circum circa domus sub dio; lucerne autem sunt vasa sale et oleo plena, quibus super incumbit ellychnium.* Herodot. lib. ii.

† *Nocte media vidi solem candido coruscantem lumine.*

Metamorphos. lib. xi.

Were it true, as some have pretended, that certain mysteries were celebrated in apartments of the labyrinth, it would not have been difficult to produce noise there as violent as thunder. Pliny assures us, that the repercussion of the air was dreadful in that edifice, merely on opening the doors, which probably acting as suckers caused others to shut. It is impossible to explain otherwise this phenomenon according to the rigor of the terms employed by that naturalist, who must be supposed to have been well informed, from the details he has given of the labyrinth *. Herodotus was not permitted to enter into the subterraneous vaults, where the artifice must have been chiefly conducted. They were the sepulchres of the crocodiles, called the *just*, or in Egyptian *suebu*, which have been taken for small lizards of a different species, and not at all noxious.

With regard to Greece, it appeared, at first, that the noise heard by the initiated in the temple of Eleusinian Ceres, proceeded from the vault or roof, which, Vitruvius says, was astonishingly vast, *immani magnitudine*, and constructed by an architect called Ictinus†. This part could easily have been made to resound by the aid of machines; but if it is allowable to cite the authority of a poem, such as the *Rape of Proserpine*, the sound came from some excavation under the pavement of the temple. Claudian, after having spoken of the lightning seen there, adds, that the dreadful

* *Quarundam autem domorum (in labyrintho) talis est situs, ut adaperientibus fores tonitru intus terribile exisset.*

† Vitruv. Præf. ad lib. vii.

bellowing

bellowing which succeeded immediately, seemed to proceed from the bowels of the earth *. Those who conducted these mysterious spectacles must have been equally embarrassed to make artificial thunder, and to copy the effects of lightning. It is the height of ridicule to suppose, that those, who assisted at the mysteries, neither heard nor saw any thing of the kind, but that the whole was the effect of imagination, while fear presented this illusion at once to their ears and eyes. The ancients speak of all these things in a manner too clear to leave the smallest room for doubt; and the Greek Plethon, when describing such initiations, employs the terms least equivocal of his language, like *keraunus*, and *pyre*, for thunder and fire †.

It does not appear at all probable, that the machine used by the ancient comedians on the theatre was ever employed in the temples, or even in the vaults. This was called a *cerauniscopium*, and it threw the lightning with violence on the theatre from a place called *bronteion*, where, according to common opinion, the thunder was imitated by rolling stones in vessels of copper. The *cerauniscopium*,

* *Jam mihi cernuntur trepidis delubra moveri
Sedibus, & claram dispergere culmina lucem,
Adventum testata Dei. Jam magnis ab imis
Auditur fremitus terris, templumque remugit
Cecropidum. De Rap. Proserp.*

Some editions of Claudian have *fulmina*, instead of *culmina*; and *Cecropium* for *Cecropidum*, which is of less importance than the former.

† Pletho. Schol. ad Orat. mag. Zoroast.

concerning which it is difficult to form any clear idea, appears to have been a very lofty machine*; and although its action might be very astonishing in open air, yet its play could not be practicable in temples, like those of the ancients, which were little raised in proportion to their extent. As to vessels being placed in the bronteion, where the thunder was counterfeited, they cannot be conceived to have produced a noise sufficiently violent, without the aid of fire. The initiated were to be terrified, and this was done effectually in the mysteries of *Mithra*, by presenting a naked sword to their throats. But their fear could not have been very great, at seeing and hearing what every person was accustomed to on the theatre. These considerations lead me to think, that in the mysteries these phenomena were better executed, and without comparison more terrible, by the aid of some pyrical composition. This secret is now lost, like the *Greek fire*, which has not been found again, as some have pretended, to create alarms in the maritime powers.

* The two words are generally defined in this manner in the Lexicons :

Κεραυνόσκοπον, *machina est altissima in scena adinstar speculae ex qua fulminum jactus exhibebantur.*

Βροντήν, *locus est in scena ubi conjecis in aenea vasa saxa tonitru simulabatur.*

Thus the *cerauniscopium* was always placed in the bronteion. The sculptors and painters, however, did not copy the thunder they placed in the hands of Jupiter from any piece employed in theatrical machines.

While

While Salmonæus, and Remulus, named Alladius in the first book of Dionysius of Halicarnassus, were regarded as the most impious of mankind for having endeavoured to imitate thunder and lightning; the priests and comedians practised the same artifices, without being blamed by any person. Nothing in ancient history seems to have had more resemblance than this to gunpowder, which in Asia was not invented to be employed for the destruction of the human race, but to make illuminations and fire-works. Whatever may be advanced, it is not fact, that the first experiments with fire-arms were made against the Mongol Tartars, in one thousand two hundred and thirty-two, to prevent them from taking the town of *Kai-tong-fou*, which, at all events, fell into their hands. Had the Chinese been acquainted with the use of fire-arms in the thirteenth century, it cannot be supposed that they would have ceased to employ them four hundred years afterwards against the robbers who took Pe-kin, and the Mandhuis, who conquered China. But the most decisive fact is, that under the reign of *Tu-iffung*, they applied to Marc Paul, a Venetian, to invent some machine for the reduction of the towns of *Siang-yang* and *Fan-bcheng*. The Chinese, therefore, who were mostly of the party of the Mongols, do not seem to have even thought of employing gunpowder; but balistæ were constructed at Pe-kin, which, in the hands of the Mahometans, could not be resisted by the strongest places of that country. What, however, must always seem surprising, is, that the return of Marc Paul to Ve-

nice was soon followed by the invention of both powder and cannon in Italy.

One point, concerning the state of chymistry in Egypt, seems to be involved in great obscurity. Pliny assures us, that a sovereign of that country had found the means of counterfeiting the precious stone called *cyanus*, which, as Mr. Hill has clearly proved, does not bear any resemblance to the sapphire of the moderns *. As the ancients gave the names of male and female to two kinds of the cyanus, Agricola believed that the procedure, spoken of here, consisted in heightening the color of the females, and changing them into males †. But it is needless to examine this, as Pliny has certainly been deceived by confounding one operation with another. Theophrastus is much more intelligible on this point, when he says, that this king of Egypt discovered the method of making false azure; and thus, instead of a precious stone, nothing more was meant than a substance to color earthen-ware and glass. When we find the Egyptians employing alkaline salts, and a kind of coarse sand, it cannot be doubted that they extracted, as is practised at this day, an earth from the metallic substance of cobalt, which being mixed with

* In his Treatise on the Lithology of Theophrastus the cyanus of the ancients was a *lapis lazuli*.

† *Tinctura ex cyano femina fit mas. Primus autem gemmam illam tinxit rex Aegypti: crysalli etiam & vitra sic tinguntur ut speciem cyani expriment: sed tunc maxime linguae facile deprehendit fraudem.* De Nat. Fossil.—Agricola seems, from this passage, not to have known the cyanus of the ancients.

kali and filex, vitrifies easily, and produces what is now called *enamel-blue*.

The great difficulty remains of determining in what time this king must have lived, whose name is no-where found in any monuments. It is foolish to pretend, that he was the first of the Ptolemies, son of Lagus, with whom Theophrastus held a literary correspondence: for he would not have omitted to name a monarch known to him so particularly; and, what few princes can boast, who deserved the esteem of philosophers.

The most ancient works of pottery found in Egypt, like those little statues already mentioned, prove that the first discovery of blue of cobalt is lost in the night of time. Besides, the Greeks of Egypt do not appear to have directed their researches towards such objects, but rather to what concerns medicinal drugs, and certain perfumes, even more precious than gold, if we judge from the precautions taken by the merchants of Alexandria to prevent their workmen from stealing. Every evening they were sent away naked *, exactly in the same manner that the Spaniards treat those wretches who work in the mines, and fish pearls, to whom they give violent emetics, whenever they entertain suspicions of their having swallowed any thing of value. It is difficult to conceive how perfumes could have been so extravagantly dear in Egypt, if the Ptolemies really transf-

* *At hercule Alexandria ubi thura interpolantur, nulla satis custodit diligentia officinas. Subligaria signantur opifici. Persona adjicitur capiti densusque reticulus, nudi emittuntur. Plin. lib. xii.*

planted thither the incense-tree, as Cleopatra had formerly the balm-tree. This was the only commendable action of her life, which contained events sufficiently numerous to fill a volume.

The chymical knowledge of the Egyptians seems to have been founded only on certain observations, without being digested into any theoretical system; and the same thing might perhaps be said of their astronomy. The cold ebullition, produced by vinegar and natron, being known to them from time immemorial, sufficed to afford some notions of the difference of acids and alkalis. By constant observation they have found that all colors, taken from vegetables, underwent a certain change, when mixed with one or other of these salts, and on this was founded their practice of painting linens. This operation, certainly not copied after the Indians, as Mr. Amailhon has very improperly insinuated *, could not produce any thing well finished; and yet, according to every appearance, it hindered them from inventing the method of printing with stamps, which would have rendered their stuffs much more beautiful. Their colors seem to have been taken chiefly from the *alkana*, and the *carthamus* now imported into Europe under the ridiculous name of *saffranum*.

When the method of making the sal-ammoniac in Egypt is considered, it appears to be altogether a chymical preparation, neither invented by the Greeks, Romans, nor Arabs, but known there at all times

* History of Commerce and Navigation of the Chinese.

from the great scarcity of wood. Anciently, as at present, the inhabitants of that country have been forced to use the dried dung of frugivorous animals for fuel; and the sal-ammoniac is produced simply by the foot of such substances. When Father Sicard pretends that the urine of animals was added, his authority must be considered as far inferior to that of the Coptes and Arabs, who have thousands of opportunities of seeing that operation at *Gizch*, and several places in the Delta, where it is performed publicly. We shall refrain from entering into any discussions relative to the opinions of those, who, like Mr. Schmidt, assert that the ammoniac of ancient Egypt was totally different from what is made at this day *; for we may judge how much the ancients can be depended on in this matter, when not one of their medical books can be found, where this salt is mentioned, without the addition of something notoriously fabulous.

The art of embalming bodies did not require, as some have imagined, any deep chymical knowledge; and a few repeated observations soon discovered the length of time necessary for the alkaline salt to penetrate the skin and flesh. This turn was always fixed at seventy days, and fortunately does not amount to two philosophic months of forty days each; otherwise the alchymists would have supposed it to contain many mysteries. It is very remarkable, that the fur-

* History of Commerce and Navigation of the Chinese.—This excellent Dissertation gained the prize of the Academy of Inscriptions.

ther we advance towards higher Egypt, the fewer mummies are found ; and those which Vansleb pretends to have seen in Thebais, were all very ill preserved. According to the unanimous testimony of the ancients, the horned adders were deposited, after their death, in the temple of Thebes ; and yet none of their remains have been discovered. Indeed, we have reason to suppose that Europe possesses very few animal mummies, taken from catacombs situated beyond the twenty-sixth degree of north latitude ; while in the neighbourhood of *Sakara*, and *Busiris*, thousands of vases are found containing the ibis. As Europeans are seldom established more to the south than Cairo, this is certainly one reason why so few researches have been made in the different cantons of Thebais. Concerning the mummies of Ethiopia we have no knowledge whatever ; and yet it would be a very curious object, to find human bodies enveloped in that substance taken by the ancients for glass, but which is perhaps a transparent gum, very abundant in that country. More of that substance is produced by a part of Arabia, Egypt, and the interior of Africa beyond the Senegal, than in all the rest of the known world ; because the acacia thrives astonishingly in those scorching regions, and is, beyond comparison, more productive than in other climates, where cold seems to produce nearly the same effect upon all resinous trees.

Learned men entertain different sentiments, concerning the real causes of the scarcity of embalmed animals in Thebais. Some, by straining the text of Plutarch,

Plutarch, pretend to prove that the Thebans never treated brutes in that manner ; and others think that the Pharaohs, having transferred the court to Memphis, caused, from some strange policy, all the sepulchres of the sacred animals to be placed in that town. This opinion of the moderns seems as little founded as what the ancients have said of a tribunal for judging the dead ; which could not have subsisted in the manner generally believed. In fact, the imagination of the Greeks has been greatly exercised on the history of Egypt. They enter frequently into details, with an air of truth, frankness, and candor, which imposes on ordinary readers ; but it vanishes like a dream, on being subjected to a rigorous examination. What Herodotus relates of certain procedures in embalming human bodies, has been proved impracticable in the *Memoirs of the Academy of Inscriptions*. The true cause of the scarcity of embalmed animals in Thebais, consisted in the difficulty of procuring a sufficient quantity of drugs, of the best quality, such as the cedrea, and bitumen of Judea. When the caravans of Arabs brought the different aromatics beyond the Isthmus of Suez, they stopped in the first towns of the Delta ; and no communication was then open between Arabia and Thebais, by the Red Sea. The Egyptians, so far from navigating there, had not even established a road to those places since known, as the ports of *Myos-hermos*, *Philoteris*, and *Berenice-Troglodytica*. They were either ignorant or indifferent about all such things, until the Ptolemies undertook, in far later times, to effect

effect what had been so long neglected. Thus it is easy to conceive, that the expence of embalming was much less at Memphis than at Thebes, where Arabian drugs could only be procured at a third or fourth hand.

Besides all their common falsehoods, the Greek authors very frequently mixed the chimeras of their own mythology with that of Egypt; and, in consequence of this, we hear Diodorus Siculus speaking of the drink of immortality given by Isis to Orus; although the Egyptians never heard of any fable of the kind. All that we know with any certainty is, that they exaggerated the virtues of the *nepenthes*, a plant nothing similar to the ambrosia; but supposed by the learned to be the Theban *opium*, extracted from a kind of poppy, called *nauti* in the language of the country. The Egyptians do not seem to have had any knowledge of the *bernavi*, obtained from green hemp, which does not grow in any of their cantons; but they might be acquainted with a composition, called *berghe*, made of the *hyoscyamus albus*, and used, in the last century, by the Arabian princes of the Thebais.

All these drugs produce the same effect on those who use them for a continuance. They weaken the memory so much, that those wretches known in Asia by the name of *theraguis*, have scarcely the smallest power of recollection; and this is almost a certain symptom of approaching death.

Thus, the *nepenthes* of Egypt has this only resemblance with *opium*, that, if taken constantly without
I omitting

omitting a single day, the dose may be augmented by degrees to half a drachm; and then it causes a man to forget so completely the history of his life, that he is incapable of exercising a thought on the time past, or on futurity. This is the art of degrading the senses, and approaching, as much as possible, to a certain felicity which we may suppose the beasts enjoy, from having, most probably, no idea of death, even when they see lifeless carcases, or are themselves ready to expire. Mankind, on the contrary, are in general agitated and dismayed with apprehensions, in the very midst of their pleasures; but we must except philosophers, who, superior to alarms, enjoy that state of repose which is the recompence of virtue.

One drug is sometimes mentioned as having been used by some fanatics of ancient Egypt, to rub their eyes, for the purpose of creating visions and extacies. The Scythians produced nearly the same effects by balancing themselves with violence on a suspended plank, or turning with rapidity always to the same side; and of this, remarkable traces are still found among the Turks.

Some naturalists assure us that the Egyptians employed nothing but Arabian incense; but it is difficult to be persuaded, that this resinous substance, applied to the eyes and forehead, would have been sufficient to force the blood and vital spirits in great quantity to the head. We are led to believe, that those poor wretches swallowed some grains of incense,
which

which occasions a kind of delirium, and was formerly used to stupify criminals before they were brought to execution. This custom continued for many ages; and we cannot even now decide precisely whether it should in sound policy have been preserved, or abolished.

The *opium* of Thebais, the *bergbe*, the *bernavi*, and other drugs of that kind, are not compositions found out by chymists, who sought for the drink of immortality, like those of China. Some extraordinary facts relating to this subject, shall be adduced in the sequel; but at present we have to speak of those pretended Egyptian inscriptions, in which foolish men fancied they perceived several things relative to the transmutation of metals.

Three inscriptions in the temple of Sais have been handed down to us: that contained in the works of Clemens of Alexandria, is simply a moral sentence: that conveyed by Plutarch appears to have been corrupted by the Greeks, who, according to the usage established at Athens, gave a veil to the Egyptian Minerva, very unbecoming in the opinion of Mr. Jablonski *. These considerations have induced the learned to prefer the passage found in the commentaries of Proclus on Timæus, of which this is a literal translation:

* Pantheon Ægypt. tom. i.—The observation of Mr. Jablonski is not so conclusive as it appears at first, when we reflect on the veil of Isis, from which that of Athens was copied.

I AM THAT WHICH IS, THAT WHICH HAS BEEN,
AND THAT WHICH SHALL BE. NO MORTAL EVER
LIFTED UP MY GARMENT. THE FRUIT ENGENDERED BY ME WAS THE SUN.

The Egyptians, according to the reprehensible custom of the Orientals in general, having personified the attributes of the divinity, what men call the wisdom of God was represented by the *Neitha*, or Minerva of Sais. Thus, the inscription we have mentioned, concerned the creation of the universe, and the pre-existing plan, according to which our world was arranged; for it would be absurd to suppose, that a regular and very complicated work could have been executed, without some previous design. None but madmen, as we have already observed, could perceive in this any connexion with the operations of the alchymists; and in the inscription on the column of Osiris, as preserved by Diodorus Siculus, beginning thus, *I am the son of Saturn, the youngest of the gods* *, it is impossible to trace a single Egyptian idea. Saturn was never heard of in the mythology of Egypt; and it does not mend the matter to allege, that by *Saturn* should be understood *Phtha*, or Vulcan, who, instead of being the youngest, passed for the most ancient of all the gods, according to allegorical traditions, invariable among the priests. This observation is sufficient to demonstrate, that the Greeks were the forgers of the inscription said to be on the column of Osiris, in the

* Biblioth. lib. v.

town of Nyfa in Arabia, although ancient geography never mentioned any such place. The expedition of Osiris, which is known to have been the same with that of Bacchus, alludes only to the course of the sun, and the different effects produced by its heat. We shall therefore refrain from entering into any details relative to the column of Isis. However much the style and expressions of that inscription may resemble the Oriental taste, yet, like many others, it has certainly been changed by the ignorance, or audacity, of translators.

The Jesuits, principally, have endeavoured, in their first relations, to describe the Chinese as determined alchymists. As the price of gold, with them, is not near so high as in Europe, the missionaries pretended, that they were chiefly occupied in search of the secret to make silver. Father Martini was not ashamed to assert, that the emperor *Hoangti*, who most probably never existed, wrought with great success in a laboratory situated on the lake *Yo-tang*, in the province of *Setchuen*, not far from the town of *Puki-ang*. What seems very surprising is, that Father Kircher, who was a man capable of dreaming and believing every thing, has rejected this account as fabulous, in his *Subterraneous World*, which is a work full of puerile chimeras. On this the physician Cleyer undertook to make researches in China; and he affirmed, on his return, that he could not find a single alembic in all that country *. The form of such ma-

* *Medicina Chinenfium ex Pulfibus & Lingua.*

Chines may vary greatly, and scarcely can it be traced in those pipes fixed on casks filled with mare's milk, from which the Tartars knew how to extract the volatile parts, long before any liquor had ever been distilled in Europe. The first introduction of spirits of wine is dated in the year one thousand two hundred; but the real epoch seems to me to be very uncertain.

The missionaries, who have written on China in latter times, pretend that alchymy has been in vogue there only since Lao-kium, whose disciples principally spread that taste through the different provinces of the empire. But, as we know the hatred of the Jesuits against *Tao-isse* and the bonzes, it is prudent and just to suspect what the spirit of party may suggest among all these religious orders. We may judge how much the human heart is vilified by the love of gold, when even misers reproach each other with avarice as an inexpressible crime.

In looking for the origin of all these fables, it must be allowed that the Chinese were making researches for a drink of immortality long before our era. This superstitious folly they received from their ancestors the Tartars, who endeavoured to render themselves immortal ever since the most ancient times; and every person, on reading what Herodotus and Strabo have written concerning some of the Scythians, must perceive instantly the connexion between all those matters *. Herodotus enters into

* Herodot. lib. iv. Strab. lib. vii.

very long details, describing the dress of a Getic nation, where he proves the religion of the grand lama was established. That deity has been surnamed the *immortal*, by some European travellers, although Dalai Lama signifies nothing more than universal priest, whose power is extensive as the ocean: for in the Mongol language the sea is called *Dalai**. Mr. d'Anville says, that those singular men called *Abioi* in the Greek text of Strabo, are no longer to be found in Europe†. But we can equally doubt if any of the Tartar cantons can now be traced, merely by the names they received from the Greek historians and geographers. Those great corrupters of national appellations have spread the greatest confusion on the whole surface of the ancient continent, for the sake of rendering their style harmonious. Besides, Mr. d'Anville should have observed, that the *Abioi* are not represented as a people, but as a society: and this appears certain, when we reflect that they seldom contracted marriages. If monks were found among the Tartars, more than thirteen hundred years before our era, under the name of *lamas*, we may believe that they alone possessed that attachment to celibacy, and austerity of manners, attributed to certain Scythians. We know of none answering that description, except the *lamas*, who make vows of chastity, which in fact signify nothing more than a renunciation of the ceremony of marriage legitimate.

* Fischer de Origine Tartarorum.

† Abridgment of Ancient Geography, vol. ii.

ly contracted ; for with them celibacy produces great disorders ; and, as Montesquieu says, where thieves abound, there we must expect many thefts.

The system of the metempsychosis probably gave rise to the idea that man might be rendered immortal, or that his soul might be enabled to pass from one human body to another, during a number of ages, without becoming either an impure beast or a feeble insect. Afterwards, as always happens, charlatans were found, who explained in a physical sense what should have been understood as purely moral. Justice, charity, and industry, were then no longer considered as necessary qualities ; but every research was made to find plants, which should be capable of operating directly on the organs, and rendering them indestructible.

It was not difficult for impostors to inculcate such flattering and extravagant ideas with ignorant men and princes, who, ever since the world existed, have been dupes of the absurdest projects, and of the most foolish hopes. The Scythians, known more particularly by the name of *Saca*, infected the Persians with their opinion concerning an immortality to be procured by vegetables. The magi of Persia had great reliance on a shrub called *hom*, which is supposed to be the same spoken of by Plutarch under the corrupt name of *omomi* *, and said to be employed by the Persians in their most superstitious sacrifices. It is possible, that the stories of the Greeks relative to the

* Treatise on *Isis* and *Osiris*.

ambrosia were derived from this doctrine of the magi; for among the Grecian fables we find many belonging originally to eastern nations, and even to the Indians. The wonderful things related by Aristophanes of the lark, and probably of that species which is tufted, are perfectly conformable to what the ancient inhabitants of India have written of the puet. Mahomet thought proper to place it in the Koran, where it is said to discover springs and veins of water, even when concealed by a very great depth of earth. It is shameful for the eighteenth century, that such absurdities should be renewed, on account of some children in France and Austria, at the very time of my writing this Section, when it was impossible for me to have had any knowledge of the letter since published by Mr. de la Lande.

Other Scythians, who had sojourned in Thibet, carried into China the chimera of the drink of immortality; and it is said that the emperor *Schi-chuan-di*, who mounted the throne in two hundred and fifty-one before our era, insisted on swallowing that liquor. The impostors, to whom he addressed himself, were cunning enough to persuade him that no virtue was contained in the plant *pu-fu*, found in the province of *Hu-quang*; they believed it indeed to have very considerable effects in restoring youth, but they had no well-verified proofs; and finally all China did not believe any vegetable was fit for extracting the drink of immortality. Such roots, they said, should be collected in Tartary, or in the islands situated on the coast of Corea, where they were infallibly

bly produced. On this, *Schi-chuan-di* caused a ship to be fitted out, and sent towards Japan, to examine all the vegetable productions; but those who undertook this voyage never returned. We have had historians so silly as to believe that Japan was first peopled by the crew of this vessel; and the inhabitants, says Father du Halde, boast at this day that they are descended from the Chinese. How can such gross fables be published in Europe, when the Japanese know that their ancestors never came from China; and their contempt for the jargon of that country is so great, that they call it the *language of confusion*, by means of which the most able find a difficulty to make themselves understood*?

Towards the year one hundred and fifty-seven before our era, another emperor of China, called *Vent-ti*, took much better precautions to procure the drink of immortality: he swallowed it secretly, and expired in the flower of his age. Forty years afterwards, the emperor *Wou-ti* succeeded in obtaining a drug of the same kind; but having delayed the experiment, it was stolen from him by one of his courtiers, say the Chinese historians, who insert in their annals what is worthy of a place in the *Thousand and One Nights*. Every thing practised since in the interior of the court, relative to such extravagancies, re-

* Mr. Boyssén supposes that *Schi-chuan-di* was actuated solely by motives of commerce when he sent a colony to Japan. But it is difficult to speak positively of what was done in China some centuries before our era.

mains so very secret, that no circumstance has transpired during several centuries.

With regard to those persons called *Lao-kium* and *Confucius*, they are too little known for us to determine whether they likewise had applied themselves to magic, and to researches on the supernatural qualities of vegetables. It is without any foundation, that, in a romance published in Europe, under the title of *Tu the Great* and *Confucius*, much knowledge in chymistry, and even in astronomy, is attributed to the latter, although neither in his time, nor in more than seventeen centuries after his death, China did not possess a single exact almanack. The first of that kind seen there were composed by learned strangers, brought thither by the conqueror *Koublai*, under whose reign the whole country changed its appearance, as shall be shown clearly in the First Section of the second volume.

We must now account for some events clothed with an air of more certainty, because they took place when history was no longer a chaos of absurdities and lies, mixed with few truths. In the year eight hundred and twenty after our era, a wretched emperor of China, named *Hien-fong*, took the drink of immortality, and expired as quickly as if he had received the point of a poignard in the heart. This has given room to suspect that the eunuchs, who were the real sovereigns, had mixed poison in the cup; but this construction, however apparently reasonable, is not well founded. Such potions might

in fact be extracted from noxious herbs and drugs, the qualities of which were unknown to those who employed them; and this is the more probable, as, thirty years after the fatal accident we have mentioned, the emperor *Suen-tsong*, who likewise drank something of the same kind, contracted a mortal disorder; and the emperor *Wou-tsong* is believed to have had a similar fate in eight hundred and forty-six.

These notorious facts are sufficient to give some idea of how many obscure people must have been poisoned from this madness, which reigned in its greatest force when the Mongol Tartars invaded China. As those conquerors used all their efforts to polish their new subjects, it is probable that they committed to the flames all books treating of the drink of immortality. Some writers of chronicles pretend, that this did not take place until the year one thousand three hundred and eighty-eight; but they have evidently introduced an error of some years; for no sooner was the dynasty of *Tuen* extinct, and the domination of the Mongol Tartars abolished, than the Chinese began again to work at their elixir. In one thousand five hundred and sixty-four, the emperor *Kia-tsing* drank the fatal potion; and he is the last victim, whose name is preserved in history.

It is almost needless to observe, that all those who were determined to use such drugs accompanied them with superstitious ceremonies performed by the monks; and finally, by submitting to the most piti-

ful practices of magic, they deserve the application of an expression used by Tacitus *.

Such has been the incorrigible madness of a people, represented as a society of philosophers: from this and many other circumstances we may conclude, that the Jesuits did not know in what true philosophy consisted. They frequently contradict each other in the most palpable manner; and Father Trigault, who was at Pe-kin previous to the conquest of the Mandhui Tartars, acknowledges that few mandarines or magistrates in that town were free from the infection of such follies †.

As China is said not to be a country where the most specific plant is produced, it seems probable, that the great reputation of the *jaem-saem*, which is brought from Tartary and Corea, is founded solely on its being employed in the pretended drink of immortality, as we have already insinuated, when speaking of that root in the article on dietetic regimen. It is very possible, that the Chinese may have made useful discoveries in plants, from having sought for the *pu-fu*, the *ku-y*, and other such chimeras.

China possesses no real chymists; and nothing more is found in the pharmacies of that country, than herbs, grains, and roots, either green or dried,

* *Stolidi vana; si mollius acciperes, miserranda.*

† *Et quidem in hac regia Pequimensi, in qua degimus, pauci sunt omnino magistratus, eunuchi, caterique primores, qui non hoc insanie morbo laborent. Et quoniam non desunt discipuli; ita neque magistri; superioribus tanto cariores, quanto immortalitatis per se majus est studium, & acrioribus igniculis excitat ambientes. Exped. apud Sinas.*

without

without any chymical preparation whatever. The great use of fire-works gave rise to the idea that these people had extensive information in pyrotechny; but if this supposition is admitted, it weighs still more in favor of the Persians, who surpassed the Chinese greatly in such inventions. Yet they cannot be said to have received instruction from us; for they employ certain procedures unknown even in Europe.

Gunpowder must have been found out by many different Asiatic nations, situated at great distances from each other. The Achemois claim the invention, as well as the people of Thibet; and it is possible that by reducing to its just value what Mark Paul has said of some pretended prodigies performed by the lamas, they will appear to have been the effect of powder.

If salt-petre be found in Thibet in so great abundance, that, as travellers pretend, the earth is in some places covered with efflorescences like those of herbage, we find a natural reason why the great inflammability and detonation of this salt has been known so long there. Lemery, however, pretends that it produces no flame, when placed in a red-hot crucible, but the sulphur and charcoal, which mix with it, when thrown into a fire of wood, are sufficient to produce such effects*. At Pegu it is found in still greater quantities in the fields than even in Thibet, and so very pure, that it can be employed without being refined. The great difficulty remains of know-

* Course of Chymistry.

ing from whom the Chinese received their knowledge of powder; for if they themselves had made the discovery, their annals would undoubtedly have indicated something of the epoch. Yet no mention whatever is made of this event in the book called *Sun-tse ping-fa*, in the chapter on the *five methods of making war by fire*, where nothing else is seen than the practices of incendiaries reduced to rules. This is not the only part of this work meriting our reprobation; for it contains different maxims, diametrically opposite to the laws of nations in peace, or in war.

The silence of the Chinese is not less remarkable with regard to the invention of porcelain. Father Detricolles, who made inquiries on the spot, who interrogated the workmen in the manufactories, and examined the different chronicles, could learn nothing satisfactory. This appearance of affecting to conceal the most interesting periods of the history of the arts they pretend to have invented, has suggested great suspicions. The only mode of gaining any important information on this point is by examining three different parts of Asia: first in the Indies, particularly at Benares, and then at *Balk* and *Samarcand*, where documents are supposed to exist, collected by men of letters, who were in correspondence with the astronomers, the geographers, and architects invited by Koublai Kan into China; but the last and most important of all is *Brantola*, the residence of the grand lamas. As the succession of those pontiffs has been very regular during many ages, it is almost certain,

tain, that their archives must contain many circumstances tending to throw light on different parts of Chinese history. For this purpose, it would be necessary to know thoroughly the language of Thibet; while the Arabic alone would be sufficient for making researches at *Balk* and *Samarcand*. The difficulty of penetrating into Japan, and remaining there stationary for some years, prevents all projects of sending learned men thither. The fragments, sent by French Jesuits from Pe-kin to their friends in Europe, are of no importance whatever; and no idea can be formed how little the work, entitled, *The Military Art of the Chinese*, by *Father Amiot*, corresponded with the expectations it excited previous to its publication. This missionary seems to have been very little versed in the matters he treated; and it seems truly surprising to hear him asserting, that each Chinese soldier makes with his own hands the powder for charging as well as for priming *. The firelocks of the Chinese at this day are undoubtedly copied from the musket with a rest, used by the Portuguese and Spaniards towards the end of the fifteenth century: and the models have probably been sent from *Macao* to the interior of China. These very ill contrived machines are fired with matches, and supported by forks fixed to them in such a manner that it is impossible to form the soldiers in three ranks. Besides, we have every reason to believe, that the lines are reinforced by people armed with bows and darts. Yet this clumsy

* Chinese Art of War, with colored prints, Concerning this work more shall be said hereafter.

arquebus furnished the Mandhui Tartars with the idea of a very efficacious weapon, which enabled them, with the assistance of field-pieces, very easily transported, to reduce the *Eleuth*, and make the emperor *Kien-long* possessor of more territory than even was conquered by *Genghis-kan*. He is supposed to be master of the third part of the continent of Asia, and in all his vast empire scarcely a single soldier is to be found, for the militia of that country is almost entirely composed of Tartars. When some weak and indolent princes succeed each other in the present dynasty, the power of that government will be overturned more speedily than it was erected.

The Chinese pretend, that they cannot employ flints, because, by an effect of climate, they become so humid, that not a single spark is produced from steel. But as nothing of the kind has been observed in the fire-arms brought from Russia to Pe-kin*, we may conclude this to be a fiction, intended to excuse the awkwardness of their workmen, who are incapable of forming the different parts of the locks.

What gives most reason to suppose the Chinese possessed of some considerable degree of chymical knowledge, is the use they make of so many substances to color their porcelain. Yet it is impossible to conceive any thing more simple than their manner of preparing them. The red alone, which is extracted from a kind of copperas, is produced by

* Bell of Antermony.—Many flints are brought from Europe to China.

means

means of two crucibles ; for all the other colors, like the azure, require nothing more than to be torrifed, or calcined in common furnaces. Besides, they knew nothing of aqua fortis ; and the people who are obliged to purify their silver, to pay imposts and customs, lose the gold it may contain ; for their refiners use nothing but the coppel, and are thus incapable of separating the gold from the silver. The tyranny of the government would be insupportable, in refusing to receive any other than pure metal into the treasury of the sovereign, if the extreme knavery of the Chinese did not render that precaution absolutely necessary ; and the fault is theirs alone, when any alloy is found in the metal, which issues from the coffers of the emperor as pure as it entered. Some of the silver used in commerce has lost the ninth or tenth part of its intrinsic value ; and the establishment of another money than copper, according to all the politics of the country, must be impossible, because it would not fail to produce a multitude, or rather an entire nation of coiners. The misfortune would not be so great, if the mandarines and magistrates were men of probity, on whose faith some reliance might be placed ; but their connivance with the forgers of false money renders that class of men very formidable throughout the whole empire. In the present state of things, the frauds and malversations committed there are beyond conception ; and the silver, called by the Tartars *marfea insa*, is so much adulterated by the Chinese, that it is not worth the twentieth per cent. of what is taken from the imperial

imperial treasury. The consequence is, that those who have not good touchstones, or, like the country people, have no knowledge of letters, are always liable to imposition. Some people have believed, that the Chinese were incapable of engraving steel dies, because they cast all their copper money. Were this the only obstacle to prevent the introduction of gold and silver specie amongst them, it might be surmounted by inviting engravers from Europe; but the Chinese know very well how to counterfeit the foreign pieces current in the commerce of Canton.

What we have said of the preparations for coloring porcelain extends likewise to those used in dying stuffs, and even to the manner of manufacturing their horn lanthorns, which was already known to the Romans in the time of Plautus. We have however to regret, that no means have hitherto been found of proving by historical documents, that the stuffs of China were anciently the same as at present. The learned dispute much concerning the nature of the silk brought in former times from Sericum; and from the notions communicated to us by different authors, it must have been only the production of wild worms, which spin on the trees in Ingour, whence we have undoubtedly received the tame species used in Europe. But this silk of Sericum, so far from having received any beautiful tints there, according to every appearance, was dyed in the West alone, either with the purple of Tyre, or other precious colors*.

China

† ——— *Tribuere colorem*
Phenices, Seres sub tegmina. Claudian.

1a

China still produces much of that raw silk of a yellowish cast, called *luteus* by Claudian; and if the ancients had known the fine stuffs dyed in that country, they would more than probably have spoken of them in their works. Not a word however is found on that subject, any more than concerning the porcelain, of which no fragment has been dug up either at Rome, or any other town of Italy, as Winkelman justly observes, in combating the erroneous opinion of Mariette, relative to the murrin vases*.

From this it appears to result, that towards the time we speak of, the Chinese had scarcely any communication with their neighbours, or that the arts had not then attained amongst them the degree of perfection they have exhibited, since the conquest of the Mongol Tartars. One discovery, unconnected indeed with chymistry, is much vaunted by them; and that is paper, which they pretend to have made in the reign of *Ven-ti*. When they are asked of what substance the books were composed, which they say were committed to the flames long before, under the reign of *Schi-chuan-di*, then they are disconcerted for want of a reply. They dare neither assert, that the use of vellum was known to them, nor confess that these pretended writings were on tablets of bambou, or wood. We do not pretend to draw the learned

In another place the same poet expresses himself:

Pars infesta croco velamina lutea Serum

Pandite.

Lucian, describing the veil of Cleopatra, says, it was tinged with the purple of Sidon.

* Description of Engraved Stones, by Baron Stofch.

of China from their embarrassment; but it seems probable, that their ancient books were made of silk. If so, they have been very wrong in substituting the worst kind of composition imaginable; for a volume of taffeta or satin would last six times longer than the paper on which the men of letters there now print their works *.

We have already made the reader observe the superstitious inclination of the Chinese for certain unequal numbers. Whatever they cannot divide by nine is divided by five; and, in consequence of such foolish ideas, they have established the opinion of five moral virtues, five canonical books or kings, five principal colors, five kinds of tastes, five tones of music, five alimentary grains, and, to crown this folly, five elements. Wood is counted amongst the latter, and this proves their total ignorance of every thing belonging to what is properly called chymistry; for no body is more easily decomposed, or more manifestly charged with heterogeneous substances. All metals of every denomination are considered as

* Father du Halde, in his Description of China, pretends, that prior to the reign of *Fen-ti*, who died in the year 157 before our era, the Chinese wrote with pointed iron on the leaves and bark of trees. But how did he learn this?

Besides, what idea can be formed of a writing made with sharp iron on the leaves even of the aloes or banana tree? We must suppose that the bark of certain trees was covered with wax, or mastich, and then wrote on with a stilum. Thus it cannot properly be said that *Schi-chuan-di* caused the books to be destroyed; for none existed in his day.

The time when paper was invented in China is very uncertain.

elements;

elements *; and in this their pretended naturalists will seem more excusable than in their mode of classing vegetable productions.

As the predilection of these people for the number nine is undoubtedly derived from the Scythians and Tartars, it would be useless to dwell here on its origin. But their prejudice in favor of the number five proceeds, in my opinion, from the ridiculous idea they entertain, that the earth is square; and its four corners, added to the sky, afford a mystical product, to regulate every matter where the number nine cannot be introduced. The latter has more influence than can well be conceived in the operations and maxims of war, while the destiny of the empire, according to the general opinion, depends on the nine vases of brass made by *Tu* the Great, who might well be an imaginary person, but the existence of the vessels is certain. These facts are treated more at large, from my having been the first person who discovered their consequences in different points of history, which could not be solved in any other manner.

By all these details we perceive how much the ideas of the Chinese have always differed from the doctrine of the Egyptians, among whom the discovery of the planets certainly occasioned the great credit of the

* After wood and metal the Chinese count water, fire, and earth, among the elements. It seems to me extraordinary that they have divided their year into four seasons. But perhaps this was borrowed from some other nation. The Egyptians counted only three seasons; and instead of having five tones in music like the Chinese, they had seven, and as many notes.

number seven, some traces of which are found still in Judaism. This however has not prevented the Egyptians from surpassing greatly the Chinese in the art of making observations, and studying nature. We are convinced of this by analyzing their dietetic regimen; because it would have been impossible for the most able physician to invent any thing better adapted to the complexion of that people.

In some countries conquest destroys every thing, while the good fortune of others is produced by conquerors, as we have twice had an opportunity of remarking in China. When the Mogul Tartars entered that country, it might have been supposed that total devastation would ensue, and that the towns must become so many heaps of ruins: but the consequences were very different. On the arrival of the Mandhui Tartars, a general destruction was again expected; but these conquerors have labored, during one hundred and twenty-eight years, with the greatest ardor, in polishing and instructing the Chinese. They spare neither pains nor expence in having useful books translated, in procuring machines and instruments, in attracting European artificers, and people capable at least of composing almanacks, or drawing maps. Without their aid the emperors of China could never know their own country; for, so far from ever travelling through the provinces, they appear but seldom even in the environs of the capital, and not one single geographer has been produced in all their dominions. The emperor *Can-bi*, greatly astonished that no glass-houses were found in China, caused one

to

to be erected at Pe-kin; and for some years before his death it was the object of his delight. Although this establishment, like all those in the hands of the Asiatic despots, languishes daily, the Tartars have since prohibited the entry of glass from Europe by the way of Canton; and Mr. Osbeck says, this law was in all its force in the year one thousand seven hundred and fifty-two.

If by any accident the present reigning dynasty should be hurled from the throne, the Chinese would not fail to speak and write as injuriously, concerning these benefactors, as of *Koublai-Kan*, whom they accused of placing too much confidence in men from the West. But the great royal canal was made by these very men from the West, who changed the face of things in all China, as we shall soon have occasion to observe in the next volume.

END OF THE FIRST VOLUME.

The Goose - a phallus 27

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